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THE
GLOBE
READERS

ILLUSTRATED

BOOK IV

MACMILLAN & CO.



NOTE.

IN Book IV. the more purely literary passages are alternated with lessons on parts of one of the most commonly studied branches of easy science, as well as on historical, social, industrial, and other subjects. The lessons in Physical Geography illustrate at some length certain of the chief phenomena capable of being readily apprehended at this stage of instruction. They are not intended to supersede, but to accompany and to supplement at important points, a regular Primer on the subject. The historical lessons, which are confined to the period of English History before the Norman Conquest, are in like manner intended to illustrate the leading events of that time. The poetical pieces carry their own recommendation,—especially the longer ballads. They almost uniformly illustrate the subjects of the prose passages beside them.

Spelling lists, explanatory notes, hints for exercises, &c., have been added, as in the earlier Books. The derivations will form an easy study of the composition of parts



THE GLOBE READERS.

BOOK IV.

COMPILED AND EDITED BY

ALEXANDER F. MURISON, M.A.,

*Of the Middle Temple, Barrister-at-Law ;
Author of "First Work in English," &c.*

London :

MACMILLAN AND CO.,

1882.

3927. f. 40



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MARKS.

THE system of marking pronunciation adopted here is borrowed from Professor Bain's *Higher English Grammar*. It is based on the original suggestions of Dr. Thomas Clark. It possesses the important advantage of indicating *accent* and *quality of vowel sound* together.

It is not intended that the pupils should be oppressed or distracted with much regular study of these marks. By careful attention to the cases that arise in the lessons, they will quickly and easily associate the marks and the sounds represented. An occasional reference to these explanations may be found quite sufficient.

(1) *á, é, í, ó, ú.* The *acute* mark (´) placed over a vowel shows that the vowel is *long* and also *accented*. For example: *mán* is for "main," or "mane"; *mén* = "mean," or "mien"; *mín* = "mine" (in any sense); *món* = "moan"; *mún* = "moon." Before the vowel *ú* the sound of "y" is often inserted; as, *tyún* = "tune."

(2) *à, è, ì, ò, ù.* The *grave* mark (`) placed over a vowel shows that the vowel is *short* and also *accented*. For example: *màn* = "man;" *mèn* = "men"; *pìn* = "pin;" *gòn* = "gone"; *fùn* = "fun."

(3) *ê, ê, û.* The *acute* and *grave* marks are combined (¨) to indicate long vowels pronounced more quickly than usual. The last, *û*, is most common; as *pûl* = "pull." Compare *pûl* = "pool."

(4) *ā, ō.* The *horizontal* mark (¯) placed over *a* and *o* indicates the vowel sounds in "far" (*fār*) and "all" (*ōl*).

(5) *ǎ, ě, ȳ, ȳ, ŭ.* The *crescent* (˘) placed over a vowel shows that the vowel is *long* (1) but *unaccented*: as *rál-wǎ* ("rail-way"), *ě-jěct*.

The last of these, *ü*, may also express *û* out of accent; as, *hànd-fül*, *fül-fil-ment*.

(6) *a, e, i, o, u*. The vowels that are *not marked at all* are *short* and *unaccented*.

Frequently, however, the accented syllable alone is marked; it being assumed that in those cases no further guidance is necessary.

(7) *ä* and *ö* may represent the vowel sounds in *far* (*fär*) and *all* (*öl*), when out of accent: as *ärtist*, but *ärtistic*; *ötum* (autumn), but *ötümna* (autumnal).

(8) The *acute* mark (') placed *after a syllable* shows that the accent falls on that syllable. But it does not indicate any quality of the vowel. For example: *com-plained'*, *al'-most*, *quart'-er*. The full marking for these words would be: *kom-pländ*, *öl-möst*, *kwört-er*.

BOOK IV.



THE NORTHMEN.

1. THE COMING OF THE NORTHMEN.

THE Northmen were a German race. Like all the nations who now people Europe, they came from Asia, and made their way along the eastern limits of our continent, till they turned aside to follow the line of route that each tribe chose for itself.

The special German nation to whom the natives of Scandinavia belong was early known as that of the Goths. These people, in very remote times—before they had any written history to fix the date, had pushed

their way northward and westward from their older homes in the East, till they reached the shores of the Baltic and the German Ocean, where they settled themselves upon the islands and coast lands of those seas, driving out the inhabitants. Whenever they found themselves strong enough to subdue the natives of the country, they made slaves of them, but if they could not do that, they generally ended by forming friendly compacts with them.

It seems to be certain that, when the Goths came to the Baltic, they found the lands peopled by older tribes of Kelts, Kimri and others, who, in their turn—but long before—had also come from beyond the shores of the Black Sea. These people were now for the most part driven by the new-comers into the more barren and colder districts, where we still find their descendants under the names of Finns and Lapps.

Some of the old Finnish tribes were much braver than their neighbours, the Lapps, and could not be so easily pushed aside by the Goths, who, therefore, were forced to try to make friends of them, and to pay respect to their gods and goddesses. In the course of time the most dreaded of these imaginary beings were placed among their deities, and worshipped as much as their chief god Odin himself. Other Finnish or Lapp tribes were held in fear by the Goths, more perhaps on account of their craft and cunning than their bravery, for we find that in the Scandinavian myths or sagas, these people are made to appear, sometimes as giants of evil repute, and sometimes as artful, hideous dwarfs.

peo'-ple (*pé-pl*)
is'-land (*t-land*)

known (*nón*)
written (*ritn*)

lim-its, boundaries, borders.

con-tin-ent (Lat. *continens*, from *con*, "together," and *tenens*, "holding"), a large extent of land *holding* many countries *together*; the mainland.

route (*rút*), course, road, journey. Distinguish *rout* (*rout*), defeat, breaking up of an army; and *rout* (*rout*), a rabble, disorderly crowd.

Scan-di-na-vi-a, Norway, Sweden, and Denmark.

that of the Goths. Read the sentence, (1) putting a noun in place of "that," and (2) omitting "that of."

re-moté (Lat. *remótus*, from *re*, "back," and *motus*, "moved"), far back (in space), far off, distant.

coast lands. In longer forms :
 "lands *on or near the coast*,"
 "lands *lying along the coast*,"
 "lands *that border on the*

coast." "Coast" is a noun used with the force of an adjective. What adjective would give the meaning?

in-hab-it-ant (Lat. *in*, "in," and *habitans*, "dwelling"), indwellers; people dwelling in a place.

whenever they found. Put out "they" and "them" in this sentence, and put in the nouns they stand for.

do that. Do what?

com-pact, bargain, agreement, treaty.

im-a-gin-ar-y, existing only in the imagination or fancy; not real.

dé-i-ties, gods and goddesses.

myth, a fanciful story, or fiction.

re-puté, fame. "Of evil repute," spoken ill of; of whom few people say any good.

2. THE GODS OF THE NORTHMEN.

THE religion of Scandinavia was, in ancient times, a form of the worship of Baal, in which the sun and fire were objects of great veneration as the sources of light and heat. But, after the Goths had settled in northern Germany and Scandinavia, this older religion

only lingered in the form of superstitions, for the new-comers established their own faith, which was that of Woden, or, as he is called by the Northmen, Odin.

We English retain in the days of the week the remembrance of this religion, which was brought to our shores more than 1,400 years ago by the Angles and Saxons, who came from northern Germany and western Denmark, to give us a new name and a new fate in the world. The Angles and Jutes and Saxons who landed in Kent and Sussex, first taught the people of Britain to divide the week into their *Sun-day*, *Moon-day*, *Ty's-day* (Ty being their god of War answering to the Mars of the Romans), *Woden's-day*, *Thor's-day* and *Freia's-day*.

Thor, to whom they dedicated the fifth day of the week, was the strong and brave son of Odin, or Woden, and a special favourite among the northern gods, while Freia is believed, by some, to have been a Finnish goddess adopted by the Northmen as their goddess of Beauty.

Nothing certain is known in regard to the precise time when the Goths first came to the north of Europe, or when they began to follow the religion of Odin. Some persons have thought that under the name of Odin, or Woden, men worshipped the powers of nature; others, that the fables invented in regard to him and the other northern gods, who were called *Æsir*, and were said to have dwelt in a home known as *Asgaard*, were all founded upon events that had happened to the people before they left their distant homes in the far East. Perhaps both these sources, and others besides, helped to make up the mythology of the Northmen. On the

whole, the true worshippers of Odin held a moral faith. They believed that the first duty of mortals was to fear and love the All-father, or Creator, and that the next was to love and cherish their kindred and the friends to whom they had sworn to be faithful. But they did not see any virtue in forgiving the guilty or sparing the innocent, if they had any wrongs to avenge. When a man was slain in combat with a private foe, his kindred felt bound to take vengeance on the slayer, and to kill him and as many of his relations as they could; and if they were unable to do it in any other way, they thought it quite fair to attack them by night, and either slay them or burn them alive in their houses. This act, which they called "taking a house from one," was not to be performed, however, until all the women, children, old people, and slaves had been allowed to make their escape. So, even in their worst deeds, they showed some mercy to the feeble, and proved that they were not without a natural sense of justice.

In Odin, the Northmen worshipped the *Alfadír*, or Father of all men and all things—the Creator. They believed that He knew all things, and, in his character of All-father, would survive, when this earth and all the lesser gods, or *Æsir*, had been swallowed up by time, to be regenerated according to the good or the evil that was in their nature; for the religion of Odin taught that the good would dwell in *Gimli*, or the golden, and the evil be doomed with cowards, liars, and deceivers, to remain in *Nastroend*, the low strand, in a dwelling made of serpents' bones. Before this final judgment,

Odin was believed to look down on earth from his seat in Valaskjálf, learning all that happens there and in heaven from his ravens, who sit one on either side of his head and whisper into his ear. In the hall, Valhal, with its five hundred and forty gates, each wide enough to admit eight hundred men abreast, he received all brave and good men after their death, and there the slain warriors pursued the life they had loved best on earth, fought their battles over again, listened to the songs of past victories, and feasted together without sorrow or pain to disturb them. Odin was supposed to award his special favours to those warriors who brought gold, or other precious substances, with them to Valhal, and who had led an active life and wandered far and wide; hence the Northmen very early showed the greatest eagerness to gather together riches on their distant voyages. This was not so much for the sake of spending their wealth, as in the hope of securing a welcome from the god whenever they might have to appear in his presence. They often ordered their children, or followers, on pain of severe punishment after death if they disobeyed them, to bury their riches with them; or they hid them away in places, known only to themselves, under the idea that Odin, who saw everything that passed on earth, would approve of their deed and reward them accordingly.

re-mém-brance

vènge-ance

chàr-ac-ter (kàr-)

be-lieve' (be-lév)

{ *de-ceive' (de-sév)*

{ *re-ceive' (re-sév)*

re-li-gion (-jun), belief or faith in God, or some such higher power.

an-cient (an-shent), old, far back (in time).

vén-er-a-tion, deep respect and reverence.

source (sórs), origin, beginning, from which something arises.

su-per-sti-tions, false or absurd religious beliefs.

es-tab-lish, set up, fix firmly.

that of Woden. Substitute the noun that "that" stands for. Could "that of" be omitted here? Compare the example in the preceding lesson.

an-swer-ing (án-ser-), corresponding, like.

dè-dic-ate, set apart or give up solemnly for some purpose.

ad-ópt-ed (Lat. *ad*, "to," and *opto*, "I choose"), chosen; taken to one's self as one's own.

pre-cise (-sis), exact.

myth-ò-lo-gy, the whole body of the myths, fables, or legends of a people.

mòr-tals (Lat. *mort-ál-is*, from *mors*, "death"), beings subject to death; human beings.

cò-m-bat (French, *com-battre*, "to fight," "to strike together"), fight, conflict.

re-gén-er-át-ed, made over again, and made better; born again.

fin-al (Lat. *fin-ál-is*, from *finis*, "an end"), last.

í-dé-a, thought, notion, supposition.

3. THE VIKINGS.

THE Northmen were such a wandering, restless race of people, that from the latter times of the Roman Republic till very nearly the days of our William the Conqueror, who was himself of direct Scandinavian descent, they were always swarming southward from their northern hives, like so many hungry bees, ever eager to settle on the first pleasant spot that seemed to offer them the food and shelter which they sought; and ready, like those busy insects, to throw off fresh broods whenever the new hives grew too crowded for them. Tribe after tribe appeared every year with the return of

warm weather ; and when the Roman empire had ceased to exist, and Charlemagne had formed a new empire in Europe, these ancient foes of Rome, under other names perhaps, but with the same spirit as of old, hung upon every frontier, and attempted to penetrate into the interior through every stream and river



that opened a way to pillage. In the later times of their wanderings, the leaders among the Northmen were known as *Vikingar*, a name derived from *vik*, a bay, from the habit which these men had of lying under covert in some little bay, or vik, and darting out in their barks to waylay and plunder any vessel passing by. The art of

coming unawares upon others, whether singly or with a large fleet, was for this reason known as a "*viking*." After a time these vikingar joined themselves into bands, and went forth in well-manned flotillas of small vessels, or rowing-boats, to attack foreign shores. After roaming over the seas from spring to autumn, they returned to their northern homes before the frost closed the harbours, and spent their winters in feasting and in athletic sports, or in preparing their shattered barks for future *viking* cruises. But faithful to the precepts of their religion, they never failed to offer sacrifices and gifts to Odin, and their favourite gods, in gratitude for past favours, and in the earnest hope of securing, by these acts of devotion, a rich harvest of spoil for their next voyage.

In the eighth and ninth centuries the Danish vikingar first became formidable to the English, and from about the year 830 they came spring after spring to plunder the unhappy land of England, roaming over the country like pirates at sea, robbing, killing, and destroying as they went on their way, till their course might be everywhere tracked by the misery and desolation they left behind them. This state of things continued with little change till the time of our King Alfred, who, before his death, in the year 901, had, however, so completely overmastered these terrible invaders, that all who were unwilling to settle peacefully in the land, and accept Christianity for their religion, were forced to leave the kingdom.

When they could no longer carry on the course of pillage in which they took such delight, the Northmen

did not care very much about coming to England ; and we find that, about the time when they ceased to torment the Anglo-Saxons, they began to appear in great numbers on the Continent. The Franks and Germans now learnt to fear their name as much as the English had once done, for in the lands where Charlemagne had reigned there was no prince strong enough to drive them out of his territories, and secure peace from their attacks as Alfred had done for his subjects.

<i>di-rèct</i>	<i>hār-bour</i>	{ <i>fōr-eign</i> (-in)
<i>de-scènt</i>	<i>hār-vest</i>	{ <i>reign</i> (rán)
<i>at-tèpt-ed</i>	<i>voy/-age</i>	<i>Chrīs-ti-àn-i-ty</i>
<i>pèn-e-trate</i>	<i>earn'-est</i>	<i>in-tér-i-or</i>
<i>ùn-a-ware</i> s	<i>mīs-er-y</i>	<i>in-vád-ers</i>

from the latter times . . . till, &c.

More than 1,000 years. The fall of the Republic and the establishment of the Empire may be dated from the battle of Actium, B.C. 31. William became king of the English in A.D. 1066.

Re-púb-lic. (Lat. *res-publica*, "the public thing, matter, or interest," "the state"), commonwealth, government without a king, the chief rulers being elected at stated times by the people.

ceased to exist. In A.D. 476.

Charlè-magne (*Shārl-maing*), or Charles the Great, king of the Franks, conquered all

Germany, and most of Italy. and fought in Spain as well as against the Northmen. He was crowned Emperor of the Romans in A.D. 800.

èm-pire (Lat. *imperium*, "government," "power"), wide dominion, as of an emperor. *frònt-i-er*, borders; the parts fronting one as one comes up to a country.

Vik-ing-ar, pirates. The Vikings have often been called "Sea-Kings," but the name has no connexion whatever with the word "king."

flot-il-las, fleets of small vessels. *ath-lèt-ic*, connected with or involving trials of strength.



4. HOW THE NORTHERN BOYS WERE BROUGHT UP.

THE sons of a northern chief learnt from their earliest years how to endure hunger and cold without complaining, and to practise all kinds of exercises by which their bodies could be strengthened and hardened. They were taught to trap and kill wild animals in the water and the air, and on the dry land ; to throw stones, darts and javelins ; wield heavy axes and clubs ; to use oars, steer boats, and to keep their barks in good trim for all weathers and seasons. They could ride and swim, and scud along upon snow-shoes, or skate long distances over the ice. They wrestled and fought together, and played at being

vikingar in such good earnest when they were small boys, that they hardly had patience to wait till they were men before they clamoured to share in all the dangers of their fierce fathers, who, after having had the same training as themselves, had rushed out into the world to seek adventures. The love which for a long time the early Northmen bore to their homes, and to the religious customs and social habits of their country, brought them back to the north at the end of every summer's short cruise. They spent the winter months in repairing their shattered barks, collecting fresh crews, planning new expeditions, and feasting among their kindred upon the rich plunder they had made on their latest voyage. Sometimes the great vikingar stayed away in strange lands for many years, but when they had been so long absent they must have had all the more to tell of the strange sights they had seen, and the great deeds they had done. Thus the boys and youths who heard their wonderful tales soon began to think that there was nothing on earth so noble and charming as to become a sea-rover, and go forth like their elders to win renown, wealth, and glory—perhaps even a small kingdom all to themselves. E. OTTÉ.

*en-durè**ex-er-cise**pa'-tience**com-plain'-ing**strèngth-ened**ad-vèn-tures**jäv-e-lins**hård-ened**ex-ped-ì-tions*

pràc-tise, to do again and again,
to work at frequently. What
is the noun?

clàm-oured, raised a clamour or
outcry. Lat. *clamorem*, from
clàmo, I cry out, exclaim.
re-noun', fame, glory.



TUBAL CAIN.

OLD Tubal Cain was a man of might
In the days when Earth was young;
By the fierce red light of his furnace bright
The strokes of his hammer rung;
And he lifted high his brawny hand
On the iron glowing clear,
Till the sparks rushed out in scarlet showers,
As he fashioned the sword and spear.
And he sang, "Hurrah for my handiwork !
Hurrah for the Spear and Sword !
Hurrah for the hand that shall wield them well,
For he shall be King and Lord !"

To Tubal Cain came many a one,
As he wrought by his roaring fire,
And each one prayed for a strong steel blade
As the crown of his desire ;
And he made them weapons sharp and strong,
Till they shouted loud for glee,
And gave him gifts of pearl and gold,
And spoils of the forest free.
And they sang, " Hurrah for Tubal Cain,
Who hath given us strength anew !
Hurrah for the smith, hurrah for the fire,
And hurrah for the metal true ! "

But a sudden change came o'er his heart
Ere the setting of the sun,
And Tubal Cain was filled with pain
For the evil he had done :
He saw that men, with rage and hate,
Made war upon their kind,
That the land was red with the blood they shed
In their lust for carnage, blind.
And he said, " Alas ! that ever I made,
Or that skill of mine should plan,
The spear and the sword for men whose joy
Is to slay their fellow-man ! "

And for many a day old Tubal Cain
Sat brooding o'er his woe ;
And his hand forbore to smite the ore,
And his furnace smouldered low.

But he rose at last with a cheerful face,
 And a bright, courageous eye,
 And bared his strong right arm for work,
 While the quick flames mounted high.
 And he sang, "Hurrah for my handiwork!"
 And the red sparks lit the air;
 "Not alone for the blade was the bright steel made;"
 And he fashioned the First Ploughshare.

And men, taught wisdom from the Past,
 In friendship joined their hands,
 Hung the sword in the hall, the spear on the wall
 And ploughed the willing lands;
 And sang, "Hurrah for Tubal Cain!"
 Our stanch good friend is he;
 And for the ploughshare and the plough
 To him our praise shall be.
 But while Oppression lifts its head,
 Or a tyrant would be lord,
 Though we may thank him for the Plough,
 We'll not forget the Sword!"

CHARLES MACKAY.

<i>fùr-nace</i>	<i>hànd-i-work</i>	<i>wield (wéld)</i>
<i>scār-let</i>	<i>cour-áge-ous</i>	<i>wrought (rôt)</i>
<i>brood'-ing</i>	<i>friend-ship</i>	{ <i>staunch (stōnsh)</i> <i>stanch (stānsh)</i>
<i>wis-dom</i>	<i>fierce (férs)</i>	

Tu-lal Cain, son of Lamech and Zillah, "an instructor of every artificer in brass and iron." (Genesis iv. 22.)

brawn-y (*brōn-y*), having plenty of brawn or muscle; muscular, strong.

fish-toned, formed, made.

French façon, "form, shape, make," from Lat. *factiōnem*, "act of making," from *facio*, "I make."

cārn-age, lit. heaps of flesh; slaughter, massacre. French, from Lat. *carnem*, "flesh."

smōl-dered, burnt slowly and without showing fire.

plough'-share (*plou-shār*), the

iron blade of the plough that *shears* or cuts the furrow.

op-press-ion, cruel, unjust, or severe treatment; holding down, crushing one. Lat. *op* (*ol*), "against or upon," and *pressum*, "to press, push, or crush."

tý-rant, harsh and oppressive ruler. Lat. *tyrannus*, Greek *tyrannos*. The *t* at the end of "tyrant" has been added in pronunciation, and thus passed into the spelling; the tongue is very ready to pronounce "t" after "n." Compare "tyranny," "tyrannous," &c.

Write out in prose the matter of this poem.

EYES AND NO EYES.

"WELL, Robert, where have you been walking this afternoon?" said Mr. Andrews to one of his pupils at the close of a holiday.

R. I have been to Broomheath, and so round by the windmill upon Campmount, and home through the meadows by the river-side.

Mr. A. Well, that is a pleasant round.

R. I thought it very dull, sir; I scarcely met with a single person. I had rather have gone along the turnpike road.

Mr. A. Why, if seeing men and horses is your object, you would, indeed, be better entertained on the high-road. But did you see William?

R. We set out together; but he lagged behind in the lane; so I walked on and left him: he is so tedious, always stopping to look at this thing and that!

Mr. A. Here he comes. Well, William, where have you been?

W. O sir, the pleasantest walk! I went all over Broomheath, and so up to the mill at the top of the hill, and then down among the green meadows by the side of the river.

Mr. A. Why, that is just the round Robert has been taking, and he complains of dulness.

W. I wonder at that! I am sure I hardly took a step that did not delight me, and I have brought my handkerchief full of curiosities home.

Mr. A. Suppose, then, you give us some account of what amused you so much. I fancy it will be as new to Robert as to me.

W. The lane leading to the heath, you know, is close and sandy, so I did not mind it much, but made the best of my way. However, I spied a curious thing enough in the hedge. It was an old crab-tree, out of which grew a great bunch of something green, quite different from the tree itself. Here is a branch of it.

Mr. A. Ah! this is mistletoe, a plant of great fame for the use made of it by the Druids of old in their religious rites and incantations. It is one of those plants which do not grow in the ground by a root of

their own, but fix themselves upon other plants ; whence they have been styled *parasitical*, as being hangers-on, or dependants.

W. When I got upon the open heath, how charming it was ! The air was so fresh, and the prospect on every side so unbounded ! Then it was all covered with gay flowers, many of which I never observed before. There were at least three kinds of heath (I have got them in my handkerchief here). There was a flock of lapwings, too, upon a marshy part of the heath, that amused me much. As I came near them, some of them kept flying round and round just over my head, and crying *peeweeet* so distinctly, one might almost fancy they spoke. I thought I should have caught one of them, for he flew as if one of his wings was broken, and often tumbled close to the ground ; but as I came near, he always made a shift to get away.

Mr. A. Ha, ha ! you were finely taken in then ! This was all an artifice of the bird to entice you away from its nest : for they build upon the bare ground, and their nests would easily be observed, did not they draw off the attention of intruders by their loud cries and counterfeit lameness.

W. I wish I had known that, for he led me a long chase, often over shoes in water. However, it was the cause of my falling in with an old man and a boy, who were cutting and piling up turf for fuel, and I had a good deal of talk with them about the manner of preparing the turf, and the price it sells at. Well, I then took my course up to the windmill on the mount. I

climbed up the steps of the mill in order to get a better view of the country round. What an extensive prospect! I counted fifteen church steeples; and I saw several gentlemen's houses peeping out from the midst of green woods and plantations; and I could trace the windings of the river all along the low grounds, till it was lost behind a ridge of hills. But I'll tell you what I mean to do, sir, if you will give me leave. I will go again, and take with me your county map, by which I shall probably be able to make out most of the places.

Mr. A. You shall have it, and I will go with you, and take my pocket spying glass.

W. From the hill I went straight down to the meadows below, and walked on the side of a brook that runs into the river. It was all bordered with reeds and flags, and tall flowering plants, quite different from those I had seen on the heath. There were a great many large dragon-flies all about the stream. I caught one of the finest and have got him here in a leaf. But how I longed to catch a bird that I saw hovering over the water, and every now and then darting down into it! It was all over a mixture of the most beautiful green and blue, with some orange colour. It was somewhat less than a thrush, and had a large head and bill, and a short tail.

Mr. A. I can tell you what that bird was,—a kingfisher, the celebrated halcyon of the ancients, about which so many tales are told. It lives on fish, which it catches in the manner you saw. It builds in holes in the banks, and is a shy retired bird, never to be seen far from the stream where it inhabits.

W. I must try to get another sight of him, for I never saw a bird that pleased me so much. Well, I followed this little brook till it entered the river, and then took the path that runs along the bank. There were a great many swallows sporting upon the surface of the water, that entertained me with their motions. Sometimes they dashed into the stream, sometimes they pursued one another so quick that the eye could scarcely follow them. In one place, where a high steep sandbank rose directly above the river, I observed some of them go in and out of holes, with which the bank was bored full.

Mr. A. Those were sandmartins, the smallest of our four species of swallows. They are of a mouse-colour above, and white beneath. They make their nests and bring up their young in these holes, which run a great depth, and by their situation are secure from all plunderers.

W. A little farther I saw a man in a boat, who was catching eels in an odd way. He had a long pole with broad iron prongs at the end, just like Neptune's trident, only there were five instead of three. This he pushed straight down among the mud in the deepest parts of the river, and fetched up the eels sticking between the prongs.

Mr. A. I have seen this method ; it is called spearing of eels.

W. While I was looking at him a heron came flying over my head, with his large, flagging wings. He lit at the next turn of the river, and I crept softly behind the bank to watch his motions. He had waded into

the water as far as his long legs would carry him, and was standing with his neck drawn in, looking intently on the stream. Presently he darted his long bill as quick as lightning into the water, and drew out a fish, which he swallowed. I saw him catch another in the



same manner. He then took alarm at some noise I made, and flew away slowly to a wood at some distance, where he settled.

Mr. A. Probably his nest was there, for herons build upon the loftiest trees they can find, and sometimes in society together like rooks.

W. I then turned homeward across the meadows, and I got to the high field next our house just as the sun was setting. What a glorious sight! The clouds were tinged purple, and crimson, and yellow, of all shades and hues, and the clear sky varied from blue to a fine green at the horizon. But how large the sun appears just as it sets!

Mr. A. It does so; and you may probably have observed the same apparent enlargement of the moon at its rising. It is an optical deception, depending upon principles which I cannot well explain to you till you know more of that branch of science. But what a number of new ideas this afternoon's walk has afforded you! Did *you* see nothing of all these sights, Robert?

R. I saw some of them, but I did not take particular notice of them; I did not care about them, and I made the best of my way home.

Mr. A. That would have been right had you been sent a message; but, as you only walked for amusement, it would have been wiser to have sought out as many sources of it as possible. But so it is, one man walks through the world with his eyes open, and another with them shut; and upon this difference depends all the superiority of knowledge the one acquires above the other. I have known sailors who had been in all the quarters of the world, and could tell you nothing but the signs of the tippling-houses they frequented in different ports, and the price and quality of the liquor. On the other hand, a Franklin could not cross the Channel without making some observations useful to

mankind. While many a vacant thoughtless youth is whirled throughout Europe without gaining a single idea worth crossing a street for, the observing eye and inquiring mind find matter of improvement and delight in every ramble in town and country. Do *you* then, William, continue to make use of your eyes ; and *you*, Robert, learn that eyes were given you to use.

Evenings at Home..

thought (thōt)

sought (sōt)

caught (kōt)

straight (strāt)

de-light (de-līt)

meadow (mēd-o)

pleasant (plēz-ant)

həl-i-day

hān-ker-chief

re-lī-gious

de-pend-ants

plant-ā-tions

in-hāb-it

com-plāin

lāp-wings

se-cure

mīx-ture

sūr-face

dūl-ness

draw (drō)

walk (wōk)

fall (fōl)

quarter (kwōrt-er)

quality (kwōl-i-ti)

enough (e-nūf)

knowledge (nōl-ēj)

hāl-cy-on

plūn-der-er

ex-tēn-sive

ap-pār-ent

en-lārg-ement

con-tīn-ue

en-ter-tāin-ed, a-mused', interested, pleased.

te'-di-ous, wearisome, dull.

cu'-ri-ōs-i-ties, curious things ; interesting and strange objects.

mistle-toe (mīzl-to), an ever-green plant that grows on apple and oak trees.

Drū-id, a priest, or wise man,

among the Celts, Gauls, and Britons of old times. The Druids regarded the oak as sacred, and sacrificed under it.

rites, ceremonies, usages.

in-cant-ā-tions, enchantments, singing or chanting some form of words, supposed to have a magical effect. Lat.

- in*, "into, towards," and *canto*, "I sing."
- styled*, named, called.
- par-a-sit-ic-al*, parasite-like. A *parasite* is one that habitually eats beside or at the expense of another; a hanger-on. Hence an animal that lives upon another, or a plant that grows upon another. Greek, *para*, "beside," and *sitos*, "food."
- prò-spect*, outlook, view. Lat. *pro*, "forth, forward," and *spectum*, "to look."
- ārt-i-fice*, trick, dodge.
- en-tice*, tempt, decoy, lead away.
- in-trūd-ers*, persons that *intrude*, or thrust themselves in, or come where they are not wanted. Lat. *in*, "into," or "upon," and *trudo*, "I thrust."
- count'-er-feit*, pretended, make-believe. French, *contrefait*; Lat. *contra*, "against," and *factum*, "made" or "done," set up in place of the *real* thing.
- vác-ant*, empty, empty-headed.
- cèl-e-brät-ed*, much praised, famous.
- ān-cients*, men of old time.
- spē-ci-es*, kinds, sorts.
- Nep-tune*, the Roman god of the sea.
- tri-dent*, a *three-toothed* instrument; a sceptre with three prongs. Lat. *tres*, "three," and *dent*, "tooth."
- mèth-od*, plan, mode, way.
- flāg-ging*, tending to droop (as if tired).
- so-ci-e-ty*, companionship. Lat. *societatem*, from *socius*, "a companion."
- ho-ri-zon*, the *bounding* line, where earth and sky appear to meet.
- òp-tic-al*, connected with the eye.
- de-cèp-tion*, deceiving, cheating. "It is an optical deception" = "The eye is deceived—the eye sees the object under conditions that make it appear different from what it really is."
- ac-quire*, gain, obtain.
- Frānk-lin*, Dr. Benjamin Franklin, a philosopher.

Give the meaning of the following expressions at greater length: "church steeples," "county map," "pocket spying glass." Find or make six similar examples, and express them at length.

SIGNS OF RAIN.

FORTY reasons for not accepting the invitation of a friend to make an excursion :

The hollow winds begin to blow,
The clouds look black, the glass is low,
The soot falls down, the spaniels sleep,
And spiders from their cobwebs peep.
Last night the sun went pale to bed,
The moon in haloes hid her head.
The boding shepherd heaves a sigh,
For see a rainbow spans the sky.
The walls are damp, the ditches smell
Closed is the pink-eyed pimpernel.
Hark how the chairs and tables crack ;
Old Betty's joints are on the rack ;
Loud quack the ducks, the peacocks cry,
The distant hills are seeming nigh ;
How restless are the snorting swine ;
The busy flies disturb the kine ;
Low o'er the grass the swallow wings,
The cricket, too, how sharp he sings ;
Puss on the hearth, with velvet paws,
Sits wiping o'er her whiskered jaws.
Through the clear stream the fishes rise,
And nimbly catch the incautious flies.
The glow-worms, numerous and bright,
Illumed the dewy dell last night.

At dusk the squalid toad was seen,
 Hopping and crawling o'er the green.
 The whirling wind the dust obeys,
 And in the rapid eddy plays.
 The frog has changed his yellow vest,
 And in a russet coat is drest.
 Though June, the air is cold and still,
 The mellow blackbird's voice is shrill.
 My dog, so altered in his taste,
 Quits mutton-bones, on grass to feast.
 And see yon rooks, how odd their flight !
 They imitate the gliding kite,
 And seem precipitate to fall,
 As if they felt the piercing ball.
 'Twill surely rain ; I see with sorrow
 Our jaunt must be put off to-morrow.

DR. JENNER.

spàn-iel

pìm-per-nel

dis-tùrb

spí-der

pea'-cock

al'-ter

ha'-loes

in-can'-tious

squal'-id

il-lumed', lighted.

im-it-ate, do as some one else
 does.

pre-cip-it-ate, thrown head-
 long.

*There are forty lines, indeed, but not quite forty reasons,
 or signs of rain.*



THE OLD RAIN-MAKER.

A TALL old man of about seventy, or perhaps eighty years, had paid us a visit. From his appearance, and the numerous spells hung about his person, I judged him to be a rain-maker. His face was smeared with wood-ashes, and there was a good deal of the ideal demon in his personal exterior.

I gave him a blue shirt, and a glass of Marsala wine, thus appealing at once to his exterior and interior.

It is always advisable to make friends with the rain-makers, as they are regarded by the natives as priests, and are considered with a certain respect. I therefore gave him another glass of wine ; or, to be correct, he drank it from a tin that had contained preserved provisions.

This caused him to blink his eyes and smack his lips, and the old rain-maker grinned a ghastly smile of admiration. His wood-ash-smeared features relaxed into an expression that denoted "more wine." I thought he had enough, and there was none to spare ; therefore, having opened his heart, I began to ask him questions.

That unfailing key, liquor, had established a confidential flow of conversation. The old fellow explained that he knew the entire country, and he had no objection to accompany us to Loboré for a small consideration in the shape of a cow. He assured me that if he were with us, the natives would be civil throughout the journey.

I asked him whether he would keep the rain away during the journey, as it would be very unpleasant should the soldiers' kits get wet. He immediately blew his rain-whistle that was suspended to his neck, and looked at me as though I could no longer doubt his capability. I then sent for a German horn from my cabin. This was a polished cow's horn, fitted with brass, which I think had cost a shilling. I begged the old rain-maker's acceptance of this instrument, which might be perhaps superior to his whistle.

The wine had now so far warmed his old blood, that the ancient sorcerer was just in that state of good will with all mankind which made him doubly grateful for

so interesting a present. He blew the horn!—again, and again! He grinned till the tears ran down his eyes, and at once suspended the glittering toy around his neck. He now said, “I am a great sheik; there is no rain-maker so great as I; you will travel with me, and this horn shall keep you dry. Don’t trouble yourself about the Baris, they won’t molest you; but start as soon as you can.”

We had thus gained a valuable ally and guide. Although I knew the direction of Loboré, I should have been obliged to travel by compass, therefore I was overjoyed that we had obtained so experienced an old fellow as the rain-maker. His name was Lokko.

At 3 P.M., on 8th February, we started, old Lokko leading the way, and waving a couple of thin, peeled sticks at a refractory black cloud that appeared determined to defy his rain-ruling powers. A few loud blasts upon the new horn, and a good deal of pantomime and gesticulation on the part of old Lokko, at length had the desired effect; the cloud went off about its business, and Lokko, having given his face an extra rub of fresh wood-ashes before starting, looked ugly enough to frighten any rain-devil out of his wits.

SIR S. W. BAKER.

<i>eight' -y (át-i)</i>	<i>pre-served</i>	<i>ghāst-ly (gāst-)</i>
<i>pèr-son-al</i>	<i>pro-vi-s-ions</i>	<i>vàl-u-a-ble</i>
<i>ex-tér-i-or</i>	<i>un-fail' -ing</i>	<i>ex-pér-i-enced</i>
<i>in-tér-i-or</i>	<i>ac-cèpt-ance</i>	<i>de-tèrm-ined</i>
<i>cāp-a-bìl-i-ty</i>	<i>in-stru-ment</i>	<i>con-vers-à-tion</i>

spells, charms ; objects (commonly words or expressions) supposed to possess magical power.

ï-dé-al, imagined, conceived by the mind.

ap-peal-ing, applying to, addressing (with the purpose of persuading).

ad-vís-a-ble, such as one would advise ; prudent.

re-lâx, loosen, become less firm or rigid.

sôr-cer-er, magician, wizard ; one that professes to foretell or to influence the future by lots, magic, evil spirits, &c.

sheik (*shék*, or *shák*), chief.

re-frâc-tor-y, stubborn, obstinate. Lat. *re*, "back," and *fractum*, "to break."

pàn-to-mime, action designed to express one's meaning.

ges-tic-ül-ä-tion, making gestures, or motions of the body.

RAIN IN SUMMER.

How beautiful is the rain !
After the dust and heat,
In the broad and fiery street,
In the narrow lane,
How beautiful is the rain !

How it clatters along the roofs,
Like the tramp of hoofs !
How it gushes and struggles out
From the throat of the overflowing spout !
Across the window-pane
It pours and pours ;
And swift and wide
With a muddy tide,
Like a river down the gutter roars
The rain, the welcome rain !

The sick man from his chamber looks
At the twisted brooks ;
He can feel the cool
Breath of each little pool ;
His fevered brain
Grows calm again,
And he breathes a blessing on the rain.

From the neighbouring school
Come the boys,
With more than their wonted noise
And commotion ;
And down the wet streets
Sail their mimic fleets,
Till the treacherous pool
Engulfs them in its whirling
And turbulent ocean.

In the country, on every side
Where far and wide,
Like a leopard's tawny and spotted hide,
Stretches the plain,
To the dry grass and the dryer grain
How welcome is the rain !

In the furrowed land
The toilsome and patient oxen stand ;
Lifting the yoke-encumbered head,
With their dilated nostrils spread,
They silently inhale
The clover-scented gale,

And the vapours that arise
From the well-watered and smoking soil.
For this rest in the furrow after toil
Their large and lustrous eyes
Seem to thank the Lord,
More than man's spoken word.

Near at hand,
From under the sheltering trees,
The farmer sees
His pastures and his fields of grain,
As they bend their tops
To the numberless beating drops
Of the incessant rain.
He counts it as no sin
That he sees therein
Only his own thrift and gain.

These, and far more than these,
The Poet sees !
He can behold
Aquarius old,
Walking the fenceless fields of air,
And from each ample fold
Scattering everywhere
The showery rain,
As the farmer scatters his grain.

He can behold
Things manifold
That have not yet been wholly told,—
Have not yet been wholly sung nor said.

For his thought, that never stops,
 Follows the water-drops
 Down to the graves of the dead,
 Down through chasms and gulfs profound,
 To the dreary fountain-head
 Of lakes and rivers under ground;
 And sees them, when the rain is done,
 On the bridge of colours seven,
 Climbing up once more to heaven,
 Opposite the setting sun.

Thus the Seer,
 With vision clear,
 Sees forms appear and disappear,
 In the perpetual round of strange
 Mysterious change
 From birth to death, from death to birth,
 From earth to heaven, from heaven to earth;
 Till glimpses more sublime
 Of things, unseen before,
 Unto his wondering eyes reveal
 The Universe, as an immeasurable wheel
 Turning for evermore
 In the rapid and rushing river of Time.

H. W. LONGFELLOW.

<i>chám-ber</i>	<i>calm (kām)</i>	<i>school (skúl)</i>
<i>tawn'-y (tōn-i)</i>	<i>wont'-ed (wònt-)</i>	<i>chasm (káz̄m)</i>
<i>beau'-ti-ful</i>	<i>whìrl-ing</i>	<i>toil'-some</i>
<i>fí-er-y</i>	<i>leo'-pard</i>	<i>pá-tient</i>
<i>wèl-come</i>	<i>fùr-row</i>	<i>pàs-tures</i>
<i>neigh'-bour-ing</i>	<i>per-pèt-ü-al</i>	<i>nàm-ber-less</i>

com-mo-tion, motion (of many) together; great stir and excitement.

mim-ic fleets, imitation fleets; floating objects in imitation of real ships.

treach-er-ous, deceitful, faithless.—Why is the pool said to be treacherous?

en-gulf, swallow or overwhelm in a gulf. A gulf is strictly a hollow; hence a deep hole or whirlpool.

turb-ù-lent, disturbed, heaving, agitated. Lat. *turbulentus*, from *turba*, “a crowd.”

yoke-encumbered, encumbered or hampered with the yoke. Compare “clover-scented,” scented with clover.—Find or make similar examples.

di-lát-ed, parted wide, spread out. Lat. *di*, “asunder,” and *latus*, “brought, carried.”

in-há-le, breathe in, draw into the lungs.

lus-trous, full of lustre; bright, shining.

in-cés-sant, unceasing, never stopping.

A-quá-ri-us, the Water-bearer, one of the signs of the zodiac. The zodiac is an imaginary broad belt in the heavens, in which the sun and the larger planets appear

to move. It was divided by the ancients into twelve equal parts, each of which they named after some object (usually an animal) which the group of stars in it seemed to represent. The sun is in the division called “Aquarius” in mid-winter (January 20th to February 19th). The poet seems to attribute all rainy weather, even in summer, to Aquarius. The name is Lat., from *aqua*, “water.”

pro-found, deep, far down below the surface. Lat. *pro-fundus*, from *pro*, “forth, forward,” and *fundus*, “the bottom.”

the bridge of colours seven. What is this? Name the seven colours.

vi-sion (*vi-zhon*), seeing, sight. Lat. *visionem*, from *visum*, “to see.”

mys-té-ri-ous, of the nature of a mystery; such as no one can explain.

sub-lime, high, lofty, elevated.

U-ni-verse, the whole world, all created things together. Lat. *universum*, from *unum*, “one,” and *versum*, “turned,” —“turned into one.”

im-méas-ùr-a-ble, larger than can be measured.

LESSON FROM THE RAIN

LET us suppose that it is summer time, that you are in the country, and that you have fixed upon a certain day for a holiday ramble. Some of you are going to gather wild-flowers, some to collect pebbles, and some without any very definite aim beyond the love of the holiday and of any sport or adventure which it may bring with it. Soon after sunrise on the eventful day you are awake, and great is your delight to find the sky clear and the sun shining warmly. It is arranged, however, that you do not start until after breakfast-time, and meanwhile you busy yourselves in getting ready all the baskets and sticks and other gear of which you are to make use during the day. But the brightness of the morning begins to get dimmed. The few clouds which were to be seen at first have grown large, and seem evidently gathering together for a storm. And sure enough, ere breakfast is well over, the first ominous big drops are seen falling. You cling to the hope that it is only a shower which will soon be over, and you go on with the preparations for the journey notwithstanding. But the rain shows no symptom of soon ceasing. The big drops come down thicker and faster; little pools of water begin to form in the hollows of the road, and the window-panes are now streaming with rain. With sad hearts you have to give up all hope of holding your excursion to-day.

It is no doubt very tantalizing to be disappointed in this way when the promised pleasure was on the very point of becoming yours. But let us see if we cannot derive some compensation even from the bad weather. Late in the afternoon the sky clears a little, and the rain ceases. You are glad to get outside again, and so we all sally forth for a walk. Streams of muddy water are still coursing along the sloping roadway. If you will let me be your guide, I would advise that we should take our walk by the neighbouring river. We wend our way by wet paths and green lanes, where every hedgerow is still dripping with moisture, until we gain the bridge, and see the river right beneath us. What a change this one day's heavy rain has made! Yesterday you could almost count the stones in the channel, so small and clear was the current. But look at it now! The water fills the channel from bank to bank, and rolls along swiftly. We can watch it for a little from the bridge. As it rushes past, innumerable leaves and twigs are seen floating on its surface. Now and then a larger branch, or even a whole tree-trunk, comes down, tossing and rolling about on the flood. Sheaves of straw or hay, planks of wood, pieces of wooden fence, sometimes a poor duck, unable to struggle against the current, roll past us and show how the river has risen above its banks and done damage to the farms higher up its course.

We linger for a while on the bridge, watching this unceasing tumultuous rush of water and the constant

variety of objects which it carries down the channel. You think it was perhaps almost worth while to lose your holiday for the sake of seeing so grand a sight as this angry and swollen river, roaring and rushing with its full burden of dark water. Now, while the scene is still fresh before you, ask yourselves a few simple questions about it, and you will find perhaps additional reasons for not regretting the failure of the promised excursion.

In the first place, where does all this added mass of water in the river come from? You say it was the rain that brought it. Well, but how should it find its way into this broad channel? Why does not the rain run off the ground without making any river at all?

But, in the second place, where does the rain come from? In the early morning the sky was bright, then clouds appeared, and then came the rain, and you answer that it was the clouds which supplied the rain. But the clouds must have derived the water from some source. How is it that clouds gather rain, and let it descend upon the earth?

In the third place, what is it which causes the river to rush on in one direction more than another? When the water was low, and you could, perhaps, almost step across the channel on the stones and gravel, the current, small though it might be, was still quite perceptible. You saw that the water was moving along the channel always from the same quarter. And now when the channel is filled with this rolling torrent of dark water,

you see that the direction of the current is still the same. Can you tell why this should be ?

Again, yesterday the water was clear, to-day it is dark and discoloured. Take a little of this dirty-looking water home with you, and let it stand all night in a glass. To-morrow morning you will find that it is clear, and that a fine layer of mud has sunk to the bottom. It is mud, therefore, which discolours the swollen river. But where did this mud come from ? Plainly, it must have something to do with the heavy rain and the flooded state of the stream.

Well, this river, whether in shallow or in flood, is always moving onward in one direction, and the mud which it bears along is carried towards the same point to which the river itself is hastening. While we sit on the bridge watching the foaming water as it eddies and whirls past us, the question comes home to us—what becomes of all this vast quantity of water and mud ?

Remember, now, that our river is only one of many hundreds which flow across this country, and that there are thousands more in other countries where the same thing may be seen which we have been watching to-day. They are all flooded when heavy rains come ; they all flow downwards ; and all of them carry more or less mud along with them.

As we walk homewards again, it will be well to put together some of the chief features of this day's experience. We have seen that sometimes the sky is clear and blue, with the sun shining brightly and warmly in ; that sometimes clouds come across the sky, and that

when they gather thickly rain is apt to fall. We have seen that a river flows ; that it is swollen by heavy rain, and that when swollen it is apt to be muddy. In this way we have learnt that there is a close connection between the sky above us and the earth under our feet. In the morning, it seemed but a little thing that clouds should be seen gathering overhead ; and yet, ere evening fell, these clouds led by degrees to the flooding of the river, the sweeping down of trees, and fences, and farm produce ; and it might even be to the destruction of bridges, the inundation of fields and villages and towns, and a large destruction of human life and property.

But perhaps you live in a large town and have no opportunity of seeing such country sights as I have been describing, and in that case you may naturally enough imagine that these things cannot have much interest for you. You may learn a great deal, however, about rain and streams even in the streets of a town. Catch a little of the rain in a plate, and you will find it to be so much clear water. But look at it as it courses along the gutters. You see how muddy it is. It has swept away the loose dust worn by wheels and feet from the stones of the street, and carried it into the gutters. Each gutter thus becomes like the flooded river. You can watch, too, how chips of straw, corks, bits of wood, and other loose objects lying in the street are borne away, very much as the trunks of trees are carried by the river. Even in a town, therefore, you can follow how changes in the sky lead to changes on the earth.

If you think for a little, you will recall many other illustrations of the way in which the common things of everyday life are connected together. As far back as you can remember, you have been familiar with such things as sunshine, clouds, wind, rain, rivers, frost, and snow, and they have grown so commonplace that you never think of considering about them. You cannot imagine them, perhaps, as in any way different from what they are; they seem, indeed, so natural and so necessary that you may even be surprised when any one asks you to give a reason for them. But if you had lived all your lives in a country where no rain ever fell, and if you were to be brought to such a country as this, and were to see such a storm of rain as you have been watching to-day, would it not be very strange to you, and would you not naturally enough begin to ask the meaning of it? Or suppose that a boy from some very warm part of the world were to visit this country in winter, and to see for the first time snow fall, and the rivers solidly frozen-over, would you be surprised if he showed great astonishment? If he asked you to tell him what snow is, and why the ground is so hard, and the air so cold, why the streams no longer flow, but have become crusted with ice—could you answer his questions?

And yet these questions relate to very common, everyday things. If you think about them, you will learn, perhaps, that the answers are not quite so easily found as you had imagined. Do not suppose that because a thing is common, it can have no interest for

you. There is really nothing so common as not to deserve your attention, and which will not reward you for your pains.

I would fain have you not to be content with what is said in this little book, or in other books, whether small or great, but rather to get into the habit of using your own eyes and seeing for yourselves what takes place in this wonderful world of ours. All round you there is abundant material for this most delightful inquiry. No excursion you ever made in pursuit of mere enjoyment and adventure by river, heath, or hill, could give you more hearty pleasure than a ramble with eyes and ears alike open to note the lessons to be learnt from every day and from every landscape. Remember that besides the printed books which you use at home, or at school, there is the great book of Nature, wherein each of us, young and old, may read, and go on reading all through life without exhausting even a small part of what it has to teach us.

It is this great book—Air, Earth, and Sea—which I would have you look into. Do not be content with merely noticing that such and such events take place. For instance, to return to our walk to the flooded river; do not let a fact such as a storm or a flood pass without trying to find out something about it. Get into the habit of asking Nature questions, as we did in the course of our homeward walk. Never rest until you get at the reasons for what you notice going on around you. In this way even the commonest things will come to wear a new interest for you. Wherever you go there

will be something for you to notice; something that will serve to increase the pleasure which the landscape would otherwise afford. You will thus learn to use your eyes quickly and correctly; and this habit of observation will be of the utmost value to you, no matter what may be the path of life which lies before you.

A. GEIKIE.

<i>col-lèct</i>	<i>break-fast</i>	<i>ad-dì-tion-al</i>
<i>ad-vèn-ture</i>	<i>bright-ness</i>	<i>op-por-tu'-ni-ty</i>
<i>e-vènt-ful</i>	<i>de-struc-tion</i>	<i>fa-mìl-i-ar</i>
<i>ar-ranged</i>	<i>moist'-ure</i>	<i>as-tòn-ish-ment</i>
<i>dàm-age</i>	<i>féat-ure</i>	<i>ab-ùnd-ant</i>
<i>de-scènd</i>	<i>fàil-ure</i>	<i>ma-tér-i-al</i>
<i>dis-ap-point'-ed</i>	<i>ex-pér-i-ence</i>	<i>tùm-ùlt-ù-ous</i>

dè-fin-ite, fixed, exact. Lat. *definitus*, having fixed limits or bounds; from *de*, "down," and *finitus*, "ended, bounded;" from *finis*, "end, limit."

è-vid-ent-ly, clearly, obviously. From Lat. *e*, "out," or "quite," and *video*, "I see."

dè-min-ous, presenting an omen, or sign of something that is going to happen—usually something evil; foreboding evil.

jour'-ney (*jür-ni*), strictly a day's travel, a going somewhere. French, *journée*, "a day."

sym-ptom, sign, indication. Greek, *symptōma*, literally, "a falling together," something *that falls* or occurs *along with* something else, and whose presence indicates the existence of the other thing.

ex-cùr-sion, a *running out* or *away from* one's usual abode; a jaunt, a trip. Lat. *excursionem*, from *ex*, "out," and *cursum* "to run."

tàn-tal-iz-ing, vexing, teasing, giving hope and presently taking it away. According to the Greek fable, *Tantalus* was punished by being made to stand in water up to the

chin, with fruit hanging over his head, while the water and the fruit went back from him whenever he tried to satisfy his thirst or his hunger.

com-pen-sá-tion, something to make up for a loss or a disappointment. Lat. *com*, "together," and *pensátum*, "to weigh,"—"to give weight for weight."

to course, to run (swiftly), to hold on its *course* or the way it is running. Lat. *cursum*, "to run."

chàn-nel, bed (of a river), passage (for water). Another form of the same word is "canál." Lat. *canális*, "a water-pipe," from *canna*, "a reed."

cür-rent, the *running*, flowing, course, of water. Lat. *curro*, "I run."

per-cép-ti-ble, capable of being perceived, seen or felt.

tòr-rent, a *boiling*, rushing current of water. Lat. *torrens*, "boiling," and hence turbulent, moving violently.

dis-col'-oured. What is the force of *dis*?

in-und-á-tion, flooding, letting the waves or water in upon. Lat. *in*, "into, upon," and *unda*, "a wave."

il-lus-trá-tion, something that throws light upon something else, an example. Lat. *il* for *in*, "into, upon," and *lustrá-tum*, "to throw light on."

ex-haust'ing, drawing out the whole, using up.

THE DRAGON OF WANTLEY.

OLD stories tell how Hercules

A dragon slew at Lerna,

With seven heads and fourteen eyes,

To see and well discern-a :

But he had a club, this dragon to drub,

Or he ne'er had done it, I warrant ye :

But More of More-hall, with nothing at all,

He slew the dragon of Wantley.

This dragon had two furious wings,
Each one upon each shoulder ;
With a sting in his tail as long as a flail,
Which made him bolder and bolder.
He had long claws, and in his jaws
Four and forty teeth of iron ;
With a hide as tough as any buff,
Which did him round environ.

Have you not heard how the Trojan horse
Held seventy men in his belly ?
This dragon was not quite so big,
But very near, I'll tell ye ;
Devour'd he poor children three,
That could not with him grapple ;
And at one sup he ate them up,
As one would eat an apple.

All sorts of cattle this dragon would eat,
Some say he ate up trees,
And that the forests sure he would
Devour up by degrees :
For houses and churches were to him geese
and turkeys ;
He ate all and left none behind,
But some stones, dear Jack, that he could not crack,
Which on the hills you will find.
Hard by a furious knight there dwelt ;
Men, women, girls, and boys,
Sighing and sobbing, came to his lodging,
And made a hideous noise.

O save us all, More of More-hall,
Thou peerless knight of these woods ;
Do but slay this dragon, who won't leave us a rag on,
We'll give thee all our goods.

This being done, he did engage
To hew the dragon down ;
But first he went new armour to
Bespeak at Sheffield town ;
With spikes all about, not within but without,
Of steel so sharp and strong,
Both behind and before, arms, legs, and all o'er,
Some five or six inches long.

Had you but seen him in this dress,
How fierce he look'd, and how big,
You would have thought him for to be
Some Egyptian porcupig :
He frightened all, cats, dogs, and all,
Each cow, each horse, and each hog ;
For fear they did flee, for they took him to be
Some strange, outlandish, hedge-hog.

To see this fight all people then
Got up on trees and houses,
On churches some, and chimneys too ;
But these put on their trousers,
Not to spoil their hose. As soon as he rose,
To make him strong and mighty,
He drank, by the tale, six pots of ale
And a quart of aqua-vitæ.

It is not strength that always wins,
For wit doth strength excel;
Which made our cunning champion
Creep down into a well,
Where he did think this dragon would drink.
And so he did in truth ;



And as he stoop'd low, he rose up and cried, Boh !
And kick'd him in the mouth.

Oh, quoth the dragon with a deep sigh,
And turn'd six times together,
Sobbing and tearing, cursing and swearing
Out of his throat of leather :

More of More-hall, O thou rascal,
 Would I had seen thee never ;
 With the thing at thy foot thou hast prick'd my
 throat,
 And I'm quite undone for ever.

Murder, murder, the dragon cried,
 Alack, alack, for grief ;
 Had you but miss'd that place, you could
 Have done me no mischief.
 Then his head he shook, trembled and quaked,
 And down he lay and cried ;
 First on one knee, then on back tumbled he ;
 So groan'd, and kick'd, and died.

OLD BALLAD.

<i>fu'-ri-ous</i>	<i>lòdg-ing</i>	<i>out-lànd-ish</i>
<i>hàd-e-ous</i>	<i>ārm-our</i>	<i>chēm-neys</i>
<i>E-gyp-tian</i>	<i>ex-cèl</i>	<i>mìs-chief</i>
<i>shoul'-der (shól-der)</i>		<i>knight (nít) }</i>
<i>tough (tùf)</i>		<i>night (nít) }</i>

Hèr-cu-les, the most famous of
 ancient heroes, remarkable
 for his strength.

dràg-on. This monster, also
 called a hydra, was said to
 have nine heads. As Her-
 cules struck them off with
 his club, two new heads grew
 on in place of each former
 one ; at last he burned them
 away. The middle head,

which was immortal, Her-
 cules buried under a huge
 rock.

Lèr-na, a district in Greece.

dis-cern, see, understand.

wàr-rant (wòr-rant), assure.

en-vi-ron, surround, encompass.

*Tró-ja*n horse. When the
 Greeks, after ten years' siege,
 were unable to take Troy
 (*Tró-i-a*, *Tró-ja*), they built

a huge horse of wood, and filling its belly with armed men, sent it into the city as a peace-offering to one of the deities worshipped by the Trojans. Then they pretended that they were going to give up the siege and return home. The present was accepted, and at night the armed men came out of the horse, and opened the gates of the city, which thus fell into the hands of the Greeks.

seventy. This number is given at random. The exact number is nowhere mentioned. Virgil names nine men.

de-vour', eat up. Lat. *de*,

"down," and *voro*, "I eat greedily."

peer-less, without peer or equal.

pôr-cû-pig, humorous for "porcupine," a small animal covered with quills. Ital. *porco spinoso*; Lat. *porcus*, "a pig," and *spinus*, "thorny, covered with thorns or spines (*spinæ*)."

by the tale, by the reckoning or numbering; according to the account kept. Compare "the *tale* of bricks" (*Exodus*, chap. v.), the number *told*, or counted, or stated.

à-quà-vi-tæ, Lat., "water of life," brandy, or other strong spirit.

quoth, said.

CRUSOE MAKING EARTHENWARE.

I HAD long studied to make, by some means or other, some earthen vessels, which, indeed, I wanted sorely, but knew not where to come at them. However, considering the heat of the climate, I did not doubt but if I could find out any clay, I might make some pots that might, being dried in the sun, be hard enough and strong enough to bear handling, and to hold anything that was dry, and required to be kept so; and as this was necessary in the preparing corn, meal, &c., which

was the thing I was doing, I resolved to make some as large as I could, and fit only to stand like jars, to hold what should be put into them.

It would make the reader pity me, or rather laugh at me, to tell how many awkward ways I took to raise this paste; what odd, misshapen, ugly things I made; how many of them fell in, and how many fell out, the clay not being stiff enough to bear its own weight; how many cracked by the over-violent heat of the sun, being set out too hastily; and how many fell in pieces with only removing, as well before as after they were dried; and, in a word, how, after having laboured hard to find the clay—to dig it, to temper it, to bring it home and work it—I could not make above two large earthen ugly things (I cannot call them jars) in about two months' labour.

However, as the sun baked these two very dry and hard, I lifted them very gently up, and set them down again in two great wicker-baskets, which I had made on purpose for them, that they might not break; and as between the pot and the basket there was a little room to spare, I stuffed it full of the rice and barley straw; and these two pots, being to stand always dry, I thought would hold my dry corn, and perhaps the meal, when the corn was bruised.

Though I miscarried so much in my design for large pots, yet I made several smaller things with better success; such as little round pots, flat dishes, pitchers, and pipkins, and any things my hand turned to; and the heat of the sun baked them quite hard.

But all this would not answer my end, which was to get an earthen pot to hold what was liquid, and bear the fire—which none of these could do. It happened after some time, making a pretty large fire for cooking my meat, when I went to put it out after I had done with it, I found a broken piece of one of my earthenware vessels in the fire, burnt as hard as a stone, and red as a tile. I was agreeably surprised to see it, and said to myself, that certainly they might be made to burn whole, if they would burn broken.

This set me to study how to order my fire, so as to make it burn some pots. I had no notion of a kiln, such as the potters burn in, or of glazing them with lead, though I had some lead to do it with; but I placed three large pipkins, and two or three pots, in a pile, one upon another, and placed my firewood all round it with a great heap of embers under them. I plied the fire with fresh fuel round the outside, and upon the top, till I saw the pots in the inside red-hot quite through, and observed that they did not crack at all. When I saw them clear red, I let them stand in that heat about five or six hours, till I found one of them, though it did not crack, did melt or run; for the sand which was mixed with the clay melted by the violence of the heat, and would have run into glass if I had gone on; so I slacked my fire gradually till the pots began to abate of the red colour; and, watching them all night, that I might not let the fire abate too fast, in the morning I had three very good (I will not say handsome) pipkins, and two other earthen pots,

as hard burnt as could be desired, and one of them perfectly glazed with the running of the sand.

After this experiment, I need not say that I wanted no sort of earthenware for my use ; but I must needs say as to the shapes of them, they were very indifferent, as any one may suppose, when I had no way of making them but as the children make dirt pies, or as a woman would make pies that never learned to raise paste.

No joy at a thing of so mean a nature was ever equal to mine, when I found I had made an earthen pot that would bear the fire ; and I had hardly patience to stay till they were cold before I set one on the fire again, with some water in it, to boil me some meat, which it did admirably well ; and with a piece of a kid I made some very good broth, though I wanted oatmeal, and several other ingredients requisite to make it as good as I would have had it be.

DEFOE.

earth-en

vi-o-lent

mis-shápen

clí-mate

hást-i-ly

mis-cár-ry

hànd-ling

èm-bers

lá-boured

{ *weight (wát)*

straw (strō)

{ *wait (wát)*

bruised (brúzd)

de-sign (de-zín)

kiln (kíl)

awk-ward (ōk-wōrd)

li-quit, fluid, capable of flowing, like water. Lat. *liquidus*, from *liqueo*, "I melt."

kiln (kíl), large stove or oven.

gràd-ù-al-ly, by degrees, step by step. From Lat. *gradus*, a step.

a-báte, lessen, grow less.

ex-pér-i-ment, trial. Lat. *ex-perior*, "I try."

in-gréd-i-ent, element, component part ; what *enters into* a compound or mixture. From Lat. *in*, "into," and *gradior*, "I go."

YOUNG AND THOUGHTLESS.

IN a crack near the cupboard, with dainties provided,
A certain young mouse with her mother resided.
So securely they lived on that fortunate spot,
Any mouse in the land might have envied their lot.

But one day the young mouse, who was given to roam,
Having made an excursion some way from her home,
On a sudden return'd with such joy in her eyes,
That her grey, sedate parent express'd some surprise.

"O Mother!" said she, "the good folks of this house,
I'm convinced, have not any ill-will to a mouse;
And those tales can't be true which you always are
telling,
For they've been at such pains to construct us a
dwelling.

"The floor is of wood, and the walls are of wires,
Exactly the size that one's comfort requires;
And I'm sure that we there should have nothing to
fear,
If ten cats with their kittens at once should appear.

"And then they have made such nice holes in the
wall,
One could slip in and out with no trouble at all;
But forcing one through such rough crannies as these,
Always gives one's poor ribs a most terrible squeeze.

"But the best of all is, they've provided us well
With a large piece of cheese of most exquisite smell;
'Twas so nice, I had put in my head to go through,
When I thought it my duty to come and fetch you."

"Ah child," said her mother, "believe, I entreat,
Both the cage and the cheese are a terrible cheat;
Do not think all that trouble they took for our good,
They would catch us, and *kill* us all there, if they
could,
As they've caught and kill'd scores; and I never could
learn
That a mouse who once enter'd did ever return!"

*Let the young people mind what the old people say,
And when danger is near them, keep out of the way.*

se-cure'-ly

fôr-tun-ate

cât

en-vied

ex-cûr-sion

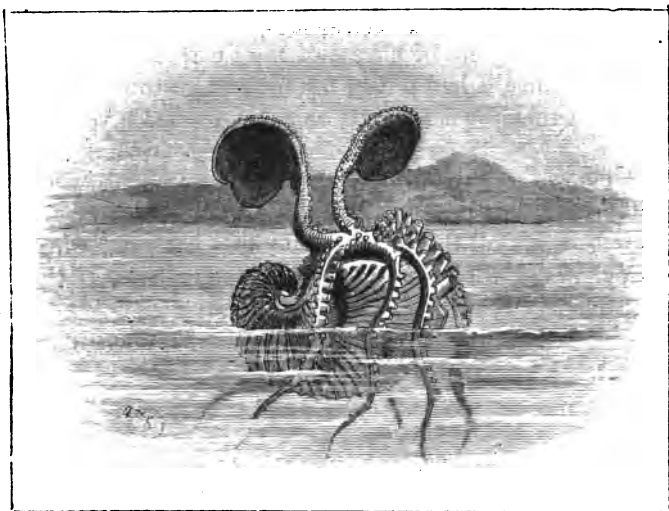
caught (kôt)

ex-prêssed

sur-prîse

dain'-ties, toothsome things,
things nice to taste, deli-
cacies. Lat. *dent*-, "tooth."
pro-vid-ed, furnished. From
Lat. *pro*, "before," and
video, "I see."
re-sid-ed, dwelt, lived. From
Lat. *re*, "again," and *sedeo*,
"I sit."
sed-âte, settled, quiet, grave.

Lat. *sedâtus*, "settled,"
"caused to sit."
con-vinc-ed, persuaded, made to
believe. From Lat. *con*,
"together, completely," and
vinco, "I conquer, over-
come."
con-strûct, build, erect. From
con, "together," and *struc-*
tum, "to build."



THE NAUTILUS.

THE shell of the Nautilus is extremely beautiful ; but, beyond this, there is little truth in the pretty fables that used to be told about it. The story, very commonly accepted, was, that the nautilus, on coming to the surface, raised two arms and spread them out as sails, at the same time applying six legs as paddles. And thus it floated, as in the figure at the top of the page, over the surface of the calm waters. Whenever it was stopped in its course, or feared danger from above, it instantly furled its sails, caught in all its oars, turned its shell mouth downwards (like a boat keel upwards), and at once dropped to the bottom like a stone.

Another animal, called the Argonaut (that is, "sailor in the *Argo*," a ship that went on a famous voyage of adventure, according to the old Greek fable), has a shell very similar to the shell of the true Nautilus. Thus it has frequently been confounded with the nautilus, and indeed is very generally known as the Paper Nautilus—its shell being as thin as paper, and exceedingly fragile; although, while the animal is living, it is elastic and yielding. Besides, two of its arms are much expanded at their extremities; they are not held up for sails, however, but are stretched back over the shell, clasping it tightly, and covering the larger portion of it. In fact, it is these arms that build up the shell, repair it when injured, and mould the substance of it into shape. The argonaut has a curious way of swimming, very different from that ascribed to the nautilus. It gathers its six arms in front of its mouth, like a long beak, so as not to resist the water very much. Then it passes the water which it breathes over its gills, into a pretty long tube, whose mouth is directed towards the head of the animal; and, by violently ejecting this water, it forces itself to move backwards.

There are three species of true Nautilus. The best-known and most abundant species is the Chambered or Pearly Nautilus. The shell is thicker than the Argonaut's, and very strong. Externally, it is like porcelain, white, and streaked with reddish chestnut. Internally, it is divided by partitions into numerous compartments or chambers. These do not exist from

the first, but are added on, one after another, as the nautilus grows larger. The animal does not occupy all the chambers, but only the outermost one. Still they are all connected together by a central membranous tube, the use of which is not certainly known.

<i>ār-go-naut</i> (-nōt)	<i>ex-trēm-i-ties</i>	<i>in-tern-al-ly</i>
<i>vī-o-lent-ly</i>	<i>ex-ceed'-ing-ly</i>	<i>ex-tern-al-ly</i>

<i>Nau'-ti-lus</i> (nō-), "little sailor,"	<i>mēm-bran-ous</i> , consisting of
from Lat. <i>nauta</i> , "a sailor."	membranes (thin, skin-like
<i>par-ti-tion</i> , division, fence.	tissue).
<i>ex-pānd</i> , unfold, spread out.	

THE NAUTILUS.

THE Nautilus ever loves to glide
 Upon the crest of the radiant tide.
 When the sky is clear and the wave is bright,
 Look over the sea for a lovely sight !
 You may watch and watch for many a mile,
 And never see Nautilus all the while,
 Till, just as your patience is nearly lost,
 Lo ! there is a bark in the sunlight tossed !
 "Sail ho ! and whither away so fast ?"
 What a curious thing she has rigged for a mast !
 "Ahoy ! ahoy ! don't you hear our hail ?"
 How the breeze is swelling her gossamer sail !
 The good ship Nautilus—yes, 'tis she,
 Sailing over the gold of the placid sea ;

And though she will never deign reply,
I could tell her hull with the glance of an eye.

Now, I wonder where Nautilus can be bound ;
Or does she always sail round and round,
With the fairy queen and her court on board,
And mariner-sprites, a glittering horde ?
Does she roam and roam till the evening light ?
And where does she go in the deep ~~midnight~~ ?
So crazy a vessel could ~~hardly~~ sail,
Or weather the blow of "a fine stiff gale."

O, the selfsame hand that holds the chain
Which the ocean binds to the rocky main—
Which guards from the wreck when the tempest raves,
And the stout ship reels on the surging waves—
Directs the course of thy little bark,
And in the light or the shadow dark,
And near the shore or far at sea,
Makes safe a billowy path for thee !

PARK BENJAMIN.

pá-tience
whà-ther

re-ply'
di-rècts

shàd-ow
bíl-low-y

rá-di-ant, shining, bright.
Strictly, sending forth rays,
or lines of light, which ap-
pear to come from the same
point like *spokes* of a wheel.
Lat. *radius*, "a spoke."
gòs-sa-mer sail, thin, flimsy-
looking sail, like gossamer.

plà-cid, *pleasing*, calm, tranquil.
Lat. *placidus*, from *placeo*,
"I please."
deign, condescend, think it
worthy of her to do some-
thing. French, *daigner*, from
Lat. *dignus*, "worthy."

EARLY DWELLERS IN BRITAIN.

FROM things which have been found in old graves and elsewhere, both in Britain and in other lands, it seems most likely that people once lived in Britain who must have been mere savages, without the use of metal, people who lived wholly by hunting and fishing. They had arrows and spear-heads of flint, and axes and hammers of stone. Think what trouble it must have been to do the commonest things with such tools. After them came a time when men had the use of bronze, and, last of all, the use of iron as we have now. You may have seen or heard of buildings, if we may call them buildings, made of great rough stones, which are called *cromlechs*. These have often been mistaken for altars, but they really are graves. Huge uncut stones were piled up without being joined by any mortar, and they were covered over with earth and smaller stones, so as to make a tump or barrow. These *cromlechs*, it seems most likely, are the graves of the first dwellers in the land, who had no use of metal. Of these very early times we can find out nothing, except from graves and such like remains, as of course we have no books that were written then. But there is every reason to think that the people who made these great and strange works were the oldest people who lived in these islands, before the Celts, that is the Welsh and Irish, came into the land.

E. A. FREEMAN.

<i>else-where</i>	<i>buìld-ings</i>	<i>mòr-tar</i>
<i>còm-mon-est</i>	<i>re-mains'</i>	<i>bàr-row</i>
<i>whól-ly (hól-lí)</i>	<i>al'-tar (ól-tar)</i>	

mère, pure, nothing but. Lat.
merus.
sàv-age, man of the woods.

French, *sauvage*, from Lat.
silvaticus, from *silva*, "a
 wood."

ON MAY MORNING.

Now the bright morning star, day's harbinger,
 Comes dancing from the east, and leads with her
 The flow'ry May, who from her green lap throws
 The yellow cowslip and the pale primrose.
 Hail, bounteous May, that doth inspire
 Mirth and youth and warm desire!
 Woods and groves are of thy dressing,
 Hill and dale doth boast thy blessing.
 Thus we salute thee with our early song,
 And welcome thee, and wish thee long.

MILTON.

<i>flow'-er-y</i>	<i>cows'-lip</i>	<i>sal-úte</i>
<i>boun'-teous</i>	<i>prim-rose</i>	<i>wel-come</i>

hår-bin-ger, forerunner, one
 that goes before another to
 announce his coming.
in-spíre, breathe into one. Lat.

in, "into," and *spiro*, "I
 breathe."
are of thy dressing. Express
 this in another form.

TROUT FLY-FISHING.

BUT of all places commend me in the still of the evening to the long placid pool, shallow on one side, with deeper water and an abrupt overhanging bank opposite. Where the sun has shone all day, and legions of ephemeræ sported in its declining rays; the bloom of the rye or clover scenting the air from the adjoining field! Now light a fresh pipe, and put on a pale Ginger Hackle for a tail fly, and a little white-winged Coachman for a dropper. Then wade in cautiously—move like a shadow—don't make a ripple. Cast slowly; long, light; let your stretcher sink a little. There, he has taken the Ginger—lead him around gently to the shallow side as you reel him in, but don't move from your position—let him tug a while, put your net under him, break his neck and slip him into your creel. Draw your line through the rings—cast again; another, and another. Keep on until you can see only the ripple made by your fly; or know when it falls by the slight tremor it imparts through the whole line down to your hand—until the whip-poor-will begins his evening song, and the little water-frog tweets in the grass close by. Not till then is it time to go home.

And so my friend asked me if it was not very lonesome fishing by myself. Why, these little people of

the woods are much better company than folks who continually bore you with the weather, and the state of their stomachs and livers, and what they ate for breakfast, or the price of gold, or the stock-market, when you have forgotten whether you have a liver or not, and don't care the toss of a penny what the price of gold is, or whether this or that stock is up or down. Lonesome! It was only just now the red squirrel came down the limb of that birch, whisking his bushy tail, and chattering almost in my face. The mink, as he snuffed the fish-tainted air from my old creel, came out from his hole among the rocks and ran along within a few feet of me. Did he take my old coat to be a part of this rock, covered with lichens and gray mosses? I recollect once, in the dim twilight of evening, a doe with her fawns came down to the stream to drink; I had the wind of her, and could see into her great motherly eyes as she raised her head. A moment since the noisy kingfisher poised himself on the dead branch of the hemlock, over my left shoulder, as if he would peep into the hole of my fish-basket. The little warbler sang in the alders close by my old felt hat, as if he would burst his swelling throat with his loud, glad song. Did either of them know that I am of a race whose first impulse is to throw a stone or shoot a gun at them? And the sparrow-hawk on that leafless spray extending over the water, sitting there as grave and dignified as a bank president when you ask him for a discount; is he aware that I can tap him on the head with the tip of my rod? These are some of the simple

incidents on the stream which afterwards awaken memories,

“ That like voices from afar off
Call to us to pause and listen,
Speak in tones so plain and childlike,
Scarcely can the ear distinguish
Whether they are sung or spoken.”

But I must start for the open water below. What a glorious haze there is just now, and how demurely the world's great eye peeps through it! Trout are not very shy though before the middle of May, even when the sun is bright. I have sometimes taken my best fish at high noon at this season of the year. I am as hungry as a horse-fly, though it is only “a wee short hour ayont¹ the twal.”² So I'll unsling my creel by that big sycamore, and build my fire in the hollow of it for a trout roast. If I burn the tree down there will be no action for trespass in a wooded country like this.

What boys are those crossing the foot-log? I'll press them into my service for a while, and make them bring wood for my fire. I know them now; the larger one has cause to remember me “with tears of gratitude,” for I bestowed on him last summer a score of old flies, a used-up leader, and a limp old rod. He offered me the liberal sum of two shillings for the very implement I have in my hand now; and to buy three flies from me *at four cents a piece*. “Halloo, Paul! what have you done with the rod I gave you?—caught many trout

¹ Beyond.

² Twelve.

with it this season? Come over the creek, you and your brother, and get me some dry wood, and gather a handful or two of the furze from that old birch to light it with. I'll give you a pair of flies—real gay ones."

THADDEUS NORRIS.

<i>plà-cid</i>	<i>ad-join'-ing</i>	<i>com'-pa-ny</i>
<i>shàl-low</i>	<i>cau'-tious-ly</i>	<i>con-tìn-ù-al-ly</i>
<i>lòne-some</i>	<i>pò-si-tion</i>	<i>dīg-ni-fied</i>
<i>squēr-rel</i>	<i>war-bler (wōr-)</i>	<i>sȳc-a-more</i>
<i>gló-ri-ous</i>	<i>moth'-er-ly (mùdh-)</i>	<i>dis-tìn-guish</i>
<i>be-stowed</i>	<i>mèm-or-ies</i>	<i>līb-er-al</i>

com-mend, intrust, give over to. Lat. *com*, "together," and *mando*, "I order, command."

ab-rupt, broken off, steep. Lat. *ab*, "away," and *ruptus*, "broken."

eph-èm-e-ra, a fly that lives but for a day; May-fly. Greek, *epi*, "upon," and *hemera*, "a day."

de-clín-ing, leaning downwards, slanting. Lat. *de*, "down," and *clino*, "I bend, lean."

trèm-or, trembling. Lat. *tremor*, from *tremo*, "I tremble."

im-pàrt, give a share, communicate. Lat. *im* (*in*), "into, towards," and *partio*, "I share, or part," from *pars*, "a part."

whip-poor-will, an American bird, so named from its cry.

See p. 137. (The writer of this passage is an American.) *im-pulse*, the force that moves one to do anything; feeling that impels or urges one. Lat. *im* (*in*), "into, upon," and *pulsum*, "to drive."

prè-sid-ent, chairman, chief. Lat. *præ*, "before," and *sedeo*, "I sit."

in-cid-ent, something that happens, especially in the course of and alongside of a main action. Lat. *in*, and *cadens*, "falling."

de-murè'-ly, bashfully, modestly.

àc-tion, law-suit.

gràt-i-tude, thankfulness. Lat. *gratitudo*, from *gratus*, "grateful, thankful."

im-ple-ment, tool; thing used to do any work with.



ON THE RIVER WITH THE ROD.

Now, when the first foul torrent of the brooks,
Swelled with the vernal rains, is ebb'd away—
And, whitening, down their mossy-tinctured stream
Descends the billowy foam—now is the time,
While yet the dark-brown water aids the guile,
To tempt the trout. The well-dissembled fly,
The rod fine-tapering with elastic spring,
Snatched from the hoary steed the floating line,
And all thy slender watery stores, prepare.
But let not on thy hook the tortured worm,
Convulsive, twist in agonising folds;
Which, by rapacious hunger swallowed deep,
Gives, as you tear it from the bleeding breast
Of the weak, helpless, uncomplaining wretch,
Harsh pain and horror to the tender hand.

When, with his lively ray, the potent sun
Has pierced the streams, and roused the finny race,
Then, issuing cheerful, to thy sport repair ;
Chief should the western breezes curling play,
And light o'er ether bear the shadowy clouds.
High to their fount, this day, amid the hills,
And woodlands warbling round, trace up the brooks
The next, pursue their rocky-channelled maze,
Down to the river, in whose ample wave
Their little naiads love to sport at large.
Just in the dubious point, where with the pool
Is mixed the trembling stream, or where it boils
Around the stone, or from the hollowed bank
Reverted plays in undulating flow,
There throw, nice-judging, the delusive fly ;
And, as you lead it round in artful curve,
With eye attentive mark the springing game.
Straight as above the surface of the flood
They wanton rise, or urged by hunger leap,
Then fix, with gentle twitch, the barbed hook ;
Some lightly tossing to the grassy bank,
And to the shelving shore slow-dragging some,
With various hand proportioned to their force.
If yet too young, and easily deceived,
A worthless prey scarce bends your pliant rod,
Him, piteous of his youth, and the short space
He has enjoyed the vital light of heaven,
Soft disengage, and back into the stream
The speckled infant throw. But should you lure
From his dark haunt, beneath the tangled roots

Of pendent trees, the monarch of the brook,
 Behoves you then to ply your finest art.
 Long time he, following cautious, scans the fly;
 And oft attempts to seize it, but as oft
 The dimpled water speaks his jealous fear.
 At last, while haply o'er the shaded sun
 Passes a cloud, he desperate takes the death,
 With sullen plunge. At once he darts along,
 Deep-struck, and runs out all the lengthened line;
 Then seeks the farthest ooze, the sheltering weed,
 The caverned bank, his old secure abode;
 And flies aloft, and flounces round the pool,
 Indignant of the guile. With yielding hand,
 That feels him still, yet to his furious course
 Gives way, you, now retiring, following now
 Across the stream, exhaust his idle rage;
 Till, floating broad upon his breathless side,
 And to his fate abandoned, to the shore
 You gaily drag your unresisting prize.

THOMSON.

tôr-rent
de-scend
slèn-der
cùrl-ing
jùdg-ing
jàal-ous
càv-erned
seize (sé)

e-làs-tic
shàd-ow-y
chàn-nelled
trèm-bling
at-tèn-tive
in-dig-nant
a-bàn-doned
yield (yéld)

dis-sèm-bled
wa'-ter-y (wō-)
swal'-lowed (swòl-)
un-com-plain'-ing
hòl-lowed
un-re-sist-ing
pro-pór-tioned
de-ceive' (de-cév)

ver-nal, spring-. Lat. *vernalis*, of or belonging to spring, from *ver*, "spring."

tinc-tured, dyed, stained, coloured. Lat. *tinctura*, "dyeing," from *tinctum*, "to moisten, dye, tinge."

prepare (line 9). What are you to prepare?

tòr-tured, extremely pained. Lat. *tortum*, "to twist, to rack with pain."

con-vul-sive, drawing itself together violently. From Lat. *con*, "together," and *vulsum*, "to pluck or pull."

ag-on-ize, suffer agony or very great pain.

rap-t-cious, seizing, grasping, greedy, ravenous. Lat. *rapax*, from *rapio*, "I seize and carry off."

the tender hand. The hand, being the part specially engaged in removing the hook, is spoken of as feeling "pain and horror," instead of the person himself.

pòt-ent, powerful. Lat. *potens*. *is-su-ing*, going forth. Through French, from Lat. *ex*, "out, forth," and *ire*, "to go."

nái-ads, water-nymphs, female deities said to preside over rivers and springs. Greek, *naiades*, from *nao*, "I flow." *du'-bi-ous*, doubtful. Lat. *du-bius*.

re-vèrt-ed, turned back. Lat. *re*, "back," and *verto*, "I turn."

und-ul-àt-ing, waving, rising and falling like a wave. Lat. *undula*, "a wavelet," from *unda*, "a wave."

de-lú-sive, deluding, cheating, deceiving, deceptive. Lat. *de*, "down," and *lusum*, "to play, sport with, mock."

pli-ant, flexible, bending easily. From French, *plier*, Lat. *pli-care*, "to fold, plait."

vi-tal, life-giving, necessary to life. Lat. *vitális*, from *vita*, "life," from *vivo*, "I live."

dis-en-gáge, release, loose, set free. Observe the force of *dis*.

pend-ent, hanging. Lat. *pendeo*, "I hang."

mòn-arch, sovereign, king. Greek, *monos*, "alone," and *archos*, "ruler."

ooze, slime, soft mud.

Write out in prose the substance of this passage. It may suffice for two or three compositions.



FISHING IN FORBIDDEN WATERS.

BUT now came on the may-fly season; the soft hazy summer weather lay sleepily along the rich meadows by Avon side, and the green and grey flies flickered with their graceful lazy up and down flight over the reeds and the water and the meadows, in myriads upon myriads. The may-flies must surely be the lotus-eaters of the ephemeræ; the happiest, laziest, carelessst fly that dances and dreams out his few hours of sunshiny life by English rivers.

Every little pitiful coarse fish in the Avon was on the alert for the flies, and gorging his wretched carcase

with hundreds daily, the gluttonous rogues ! and every lover of the gentle craft was out to avenge the poor may-flies.

So one fine Thursday afternoon, Tom having borrowed East's new rod, started by himself to the river. He fished for some time with small success, not a fish would rise at him ; but, as he prowled along the bank, he was presently aware of mighty ones feeding in a pool on the opposite side, under the shade of a huge willow-tree. The stream was deep here, but some fifty yards below was a shallow, for which he made off hot-foot ; and forgetting landlords, keepers, solemn prohibitions of the Doctor, and everything else, pulled up his trousers, plunged across, and in three minutes was creeping along on all fours towards the clump of willows.

It isn't often that great chub, or any other coarse fish, are in earnest about anything, but just then they were thoroughly bent on feeding, and in half-an-hour Master Tom had deposited three thumping fellows at the foot of the giant willow. As he was baiting for a fourth pounder, and just going to throw in again, he became aware of a man coming up the bank not one hundred yards off. Another look told him that it was the under-keeper. Could he reach the shallow before him ? No, not carrying his rod. Nothing for it but the tree : so Tom laid his bones to it, shinning up as fast as he could, and dragging up his rod after him. He had just time to reach and crouch along upon a huge branch some ten feet up, which stretched out over

the river, when the keeper arrived at the clump. Tom's heart beat fast as he came under the tree; two steps more and he would have passed, when, as ill-luck would have it, the gleam on the scales of the dead fish caught his eye, and he made a dead point at the foot of the tree. He picked up the fish one by one; his eye and touch told him that they had been alive and feeding within the hour. Tom crouched lower along the branch, and heard the keeper beating the clump. "If I could only get the rod hidden," thought he, and began gently shifting it to get it alongside him; "willow-trees don't throw out straight hickory shoots twelve feet long, with no leaves, worse luck." Alas! the keeper catches the rustle, and then a sight of the rod, and then of Tom's hand and arm.

"Oh, be up ther' be 'ee?" says he, running under the tree. "Now you come down this minute."

"Tree'd at last," thinks Tom, making no answer, and keeping as close as possible, but working away at the rod, which he takes to pieces: "I'm in for it, unless I can starve him out." And then he begins to meditate getting along the branch for a plunge and scramble to the other side; but the small branches are so thick, and the opposite bank so difficult, that the keeper will have lots of time to get round by the ford before he can get out, so he gives that up. And now he hears the keeper beginning to scramble up the trunk. That will never do; so he scrambles himself back to where his branch joins the trunk, and stands with lifted rod.

"Hullo, Velveteens, mind your fingers if you come any higher."

The keeper stops and looks up, and then with a grin says, "Oh ! be you, be it, young measter ? Well, here's luck. Now I tells 'ee to come down at once, and 't'll be best for 'ee."

"Thank 'ee, Velveteens, I'm very comfortable," said Tom, shortening the rod in his hand, and preparing for battle.

"Werry well, please yourself," says the keeper, descending however to the ground again, and taking his seat on the bank ; "I bean't in no hurry, so you med take your time. I'll larn 'ee to gee honest folk names afore I've done with 'ee."

"My luck as usual," thinks Tom ; "what a fool I was to give him a black. If I'd called him 'keeper' now, I might get off. The return match is all his way."

The keeper quietly proceeded to take out his pipe, fill, and light it, keeping an eye on Tom, who now sat disconsolately across the branch, looking at keeper—a pitiful sight for men and fishes. The more he thought of it, the less he liked it. "It must be getting near second calling-over," thinks he. Keeper smokes on stolidly. "If he takes me up, I shall be flogged safe enough. I can't sit here all night. Wonder if he'll rise at silver."

"I say, keeper," said he, meekly, "let me go for two bob?"

"Not for twenty neither," grunts his persecutor.

And so they sat on till long past second calling-over ;

and the sun came slanting in through the willow-branches, and telling of locking-up near at hand.

"I'm coming down, keeper," said Tom at last with a sigh, fairly tired out. "Now what are you going to do?"

"Walk 'ee up to School, and give 'ee over to the Doctor; them's my orders," says Velveteens, knocking the ashes out of his fourth pipe, and standing up and shaking himself.

"Very good," said Tom; "but hands off, you know. I'll go with you quietly, so no collaring or that sort of thing."

Keeper looked at him a minute. "Werry good," said he at last; and so Tom descended, and wended his way drearily by the side of the keeper up to the School-house, where they arrived just at locking-up. As they passed the School-gates, the Tadpole and several others who were standing there caught the state of things, and rushed out, crying "Rescue!" but Tom shook his head, so they only followed to the Doctor's gate, and went back sorely puzzled.

How changed and stern the Doctor seemed from the last time that Tom was up there, as the keeper told the story, not omitting to state how Tom had called him blackguard names. "Indeed, sir," broke in the culprit, "it was only Velveteens." The Doctor only asked one question.

"You know the rule about the banks, Brown?"

"Yes, sir."

"Then wait for me to-morrow, after first lesson."

"I thought so," muttered Tom.

"And about the rod, sir?" went on the keeper;
"Master's told we as we might have all the rods—"

"Oh, please, sir," broke in Tom, "the rod isn't mine."

The Doctor looked puzzled, but the keeper, who was a good-hearted fellow, and melted at Tom's evident distress, gave up his claim. Tom was flogged next morning, and a few days afterwards met Velveteens, and presented him with half-a-crown for giving up the rod claim, and they became sworn friends; and I regret to say that Tom had many more fish from under the willow that may-fly season, and was never caught again by Velveteens.

T. HUGHES.

sleep'-i-ly

eph-èm-er-æ

câre-less-est

sùn-shîn-y

glût-ton-ous

bòr-rowed

thòr-ough-ly

dréar-i-ly

blàck-guard

mýr-i-ad, a countless number.

Greek, *urias*, the number of ten thousand.

lò-tus, a shrub, whose fruit caused sleepiness or forgetfulness.

sòl-enn (sòl-em), serious, grave.

pro-hib-i-tion, forbidding, bidding or ordering one not to do something. Lat. *pro*, "before," and *habeo*, "have or hold."

de-pò-sit, lay down. Lat. *de*, "down," and *positum*, "to place."

mèd-it-ate, think over.

here's luck. Tom had chaffed

this keeper a short time before, and the keeper had hitherto got no opportunity to punish him.

dis-còn-sol-ate-ly, without consolation, or comfort, in low spirits.

stòl-id-ly, without energy or hurry, taking it coolly.

pèr-se-cù-tor, one that persecutes, or follows another steadily and vexatiously. Lat. *per*, "through," and *sequor, secutus*, "to follow."

rès-cue, set free, deliver.

cùl-prit, person in fault. From Lat. *culpa*, "fault."

TO DAFFODILS.

FAIR daffodils, we weep to see
 You haste away so soon ;
 As yet the early rising sun
 Has not attain'd his noon :
 Stay, stay,
 Until the hastening day,
 Has run
 But to the evensong ;
 And having prayed together, we
 Will go with you along.

We have short time to stay, as you ;
 We have as short a spring :
 As quick a growth to meet decay
 As you, or any thing :
 We die,
 As your hours do ; and dry
 Away
 Like to the summer's rain,
 Or as the pearls of morning dew,
 Ne'er to be found again. .

HERRICK.

dâf-fo-dil, a plant of the lily kind, with deep yellow flowers, also called king's spear. The name is corrupted from French (*fleur*)

d'asphodèle, "flower of asphodel," Greek *asphodelos*. *de-cay'*, *falling down, off, or away*, wasting away. Lat. *de*, "down," and *cado*, "I fall."

THE ANGLER AND THE LITTLE FISH.

A MAN was angling in the river one day, and caught a small perch. As he was taking it off the hook and going to put it into his basket, the fish opened its mouth and began to implore his pity, begging that he would throw it into the river again. "And why should I have pity on you and throw you into the river again?" asked the man. "Why," said the fish, "because at present I am but young and little, and therefore not so well worth your while as I shall be if you take me some time hence, when I am grown larger." "That may be," replied the man, "but I am not one of those fools that give up what they have for certain, in the mere hope of gaining something that is altogether uncertain."

ÆSOP.

àngling (*àng-gling*)*caught* (*kōt*)*re-plied**lask-et**be-cause'**al'-to-gèth-er**im-plóre**there'-fore**un-cér-tain*

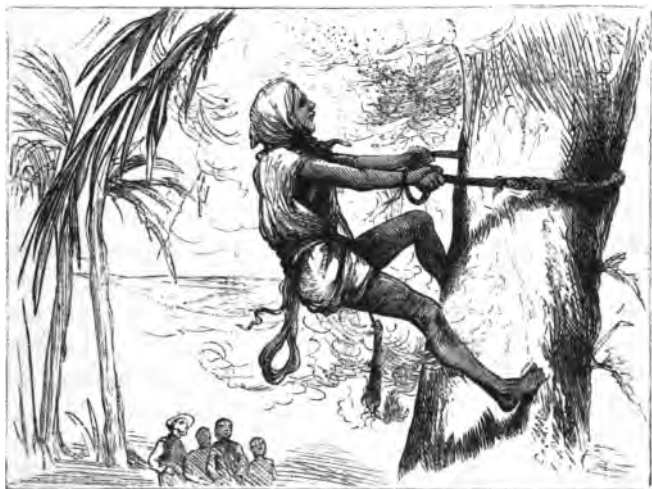
BEE-HUNTERS.

ONE of the most important and valuable products of the island of Timor, in the Malay Archipelago, is bees'-wax. This is formed by the wild bees, which build huge honeycombs, suspended in the open air from the under-side of the lofty branches of the highest trees. These are of a semicircular form, and often three or four feet in diameter. I once saw the natives take a bees' nest, and a very interesting sight it was. In the

valley where I used to collect insects, I one day saw three or four Timorese men and boys under a high tree, and, looking up, saw on a very lofty horizontal branch three large bees' combs. The tree was straight and smooth-barked and without a branch, till at seventy or eighty feet from the ground it gave out the limb which the bees had chosen for their home. As the men were evidently looking after the bees, I waited to watch their operations. One of them first produced a long piece of wood, apparently the stem of a small tree or creeper, which he had brought with him, and began splitting it through in several directions, which showed that it was very tough and stringy. He then wrapped it in palm-leaves, which were secured by twisting a slender creeper round them. He then fastened his cloth tightly round his loins, and producing another cloth wrapped it round his head, neck, and body, and tied it firmly round his neck, leaving his face, arms, and legs completely bare. Slung to his girdle he carried a long thin coil of cord; and while he had been making these preparations one of his companions had cut a strong creeper or bush-rope eight or ten yards long, to one end of which the wood-torch was fastened, and lighted at the bottom, emitting a steady stream of smoke. Just above the torch a chopping-knife was fastened by a short cord.

The bee-hunter now took hold of the bush-rope just above the torch and passed the other end round the trunk of the tree, holding one end in each hand. Jerking it up the tree a little above his head, he set

his foot against the trunk, and leaning back began walking up it. It was wonderful to see the skill with which he took advantage of the slightest irregularities of the bark or obliquity of the stem to aid his ascent, jerking the stiff creeper a few feet higher when he had found a firm hold for his bare foot. It almost made



me giddy to look at him as he rapidly got up—thirty, forty, fifty feet above the ground ; and I kept wondering how he could possibly mount the next few feet of straight smooth trunk. Still, however, he kept on with as much coolness and apparent certainty as if he were going up a ladder, till he had got within ten or fifteen feet of the bees. Then he stopped a moment,

and took care to swing the torch (which hung just at his feet) a little towards these dangerous insects, so as to send up the stream of smoke between him and them. Still going on, in a minute more he brought himself under the limb, and, in a manner quite unintelligible to me, seeing that both hands were occupied in supporting himself by the creeper, managed to get upon it.

By this time the bees began to be alarmed, and formed a dense buzzing swarm just over him, but he brought the torch up closer to him, and coolly brushed away those that settled on his arms or legs. Then stretching himself along the limb, he crept towards the nearest comb and swung the torch just under it. The moment the smoke touched it, its colour changed in a most curious manner from black to white, the myriads of bees that had covered it flying off and forming a dense cloud above and around. The man then lay at full length along the limb, and brushed off the remaining bees with his hand, and then drawing his knife cut off the comb at one slice close to the tree, and attaching the thin cord to it, let it down to his companions below. He was all this time enveloped in a crowd of angry bees, and how he bore their stings so coolly, and went on with his work at that giddy height so deliberately, was more than I could understand. The bees were evidently not stupefied by the smoke or driven away far by it, and it was impossible that the small stream from the torch could protect his whole body when at work. There were three other combs on

the same tree, and all were successively taken, and furnished the whole party with a luscious feast of honey and young bees, as well as a valuable lot of wax.

After two of the combs had been let down, the bees became rather numerous below, flying about wildly and stinging viciously. Several got about me, and I was soon stung, and had to run away, beating them off with my net and capturing them for specimens. Several of them followed me for at least half a mile, getting into my hair and persecuting me most pertinaciously, so that I was more astonished than ever at the immunity of the natives. I am inclined to think that slow and deliberate motion, and no attempt at escape, are perhaps the best safeguards. A bee settling on a passive native probably behaves as it would on a tree or other inanimate substance, which it does not attempt to sting. Still they must often suffer, but they are used to the pain and learn to bear it impassively, as without doing so no man could be a bee-hunter.

A. R. WALLACE.

<i>vàl-ŭ-a-ble</i>	<i>Ti-mor-ése</i>	<i>in-sects</i>
<i>hon'-ey-comb (hùn-)</i>	<i>o-per-à-tions</i>	<i>com-pléte-ly</i>
<i>stu'-pe-fied</i>	<i>ap-pár-ent-ly</i>	<i>cèr-tain-ty</i>
<i>spè-ci-mens</i>	<i>ad-vàn-tage</i>	<i>màn-agd</i>
<i>pèr-se-cút-ing</i>	<i>myr'-i-ads</i>	<i>fùr-nished</i>
<i>de-lìb-er-ate</i>	<i>càp-tūr-ing</i>	<i>sáfe-guards</i>
<i>used (yúzd)</i>		<i>brought (brōt)</i>
<i>lìmb (lìm)</i>		<i>tìght (tít)</i>
<i>wrap (ràp)</i>		<i>slìght (slít)</i>

prò-ducts, things produced, grown or made. Lat. *pro*, "before, forward," and *duc-tum*, "to draw, or bring."

Ar-chi-pèl-a-go, a sea with many islands in it, a group of islands. Greek, *archi*, "chief," and *pelagos*, "sea." The name was originally given to the "chief sea" of the Greeks, the *Ægean Sea*, which contains very many islands.

sus-pend-ed, hung beneath, hanging down from. Lat. *sus* (*sub*), "under," and *pendo*, "I hang up."

sèm-i-cir-cùl-ar, like a half circle.

dì-à-me-ter, the measure through, or across, a straight line passing through the centre of a circle and touching the circumference with its two ends. Greek, *dia*, "through," and *metron*, "measure."

hor-i-zòn-tal, on a line with the horizon, level, stretching right out from the trunk. The opposite is "perpendicular," or "vertical."

e-mit, send out, give forth. Lat. *e*, "out," and *mitto*, "I send."

ir-reg-ùl-àr-i-ties, parts jutting out, or hollow, not straight and smooth. Lat. *ir* (*in*),

"not," and *regularis*, "regular," from *regula*, "rule;" parts where the form of the tree departs from the rule, or regular shape.

ob-li-qui-ty, slant, crookedness. *un-in-tel-li-gi-ble*, not understandable. From English *un*, "not," and Lat. *intelligo*, "I understand." The meaning is expressed in other words in another part of the lesson.

en-vèl-op, to surround on all sides.

de-lib-er-ate-ly, coolly, without hurry or excitement, like one whose mind is firmly made up. Lat. *deliberatum*, "to weigh well in one's mind, consider well," from *de*, "down," and *libratum*, "to weigh, to balance," from *libra*, "a balance."

suc-cess-ive-ly, one succeeding another, one after another. Lat. *suc* (*sub*), "under," or "after," and *cessum*, "to go."

lùs-cious, delightfully sweet.

vì-cious-ly, wickedly, angrily and sorely. Lat. *vitium*, "vice, fault."

per-tin-à-cious-ly, obstinately, determinedly. Lat. *pertinax*, from *per*, "thoroughly," and *tenax*, "tenacious," from

teneo, "I hold,"—holding on to a thing and doggedly refusing to let go.
im-mun'-i-ty (-myūn-), freedom from obligation, or duty; here, from harm. Lat. *immunitas*, from *im* (*in*), "not," and *munus*, "a duty," or "charge."
pàss-ive, *suffering*, making no

resistance, remaining quite still. Lat. *pator*, *passus*, "to suffer."
in-àn-i-mate, without animal life, lifeless, dead. Lat. *in*, "not," and *animatus*, "endowed with life," from *anima*, "life, breath."
im-pàss-ive-ly, as if not suffering or feeling pain.

TO A BEE.

THOU wert out betimes, thou busy, busy bee!

As abroad I took my early way,
 Before the cow from her resting-place
 Had risen up and left her trace

On the meadow, with dew so grey,
 Saw I thee, thou busy, busy, bee.

Thou wert working late, thou busy, busy bee!

After the fall of the cistus flower,
 When the primrose of evening was ready to burst,
 I heard thee last, as I saw thee first;

In the silence of the evening hour,
 Heard I thee, thou busy, busy bee.

Thou art a miser, thou busy, busy bee!

Late and early at employ;
 Still on thy golden stores intent,
 Thy summer in heaping and hoarding is spent
 What thy winter will never enjoy;
 Wise lesson this for me, thou busy, busy bee!

Little dost thou think, thou busy, busy bee,
 What is the end of thy toil !
 When the latest flowers of the ivy are gone,
 And all thy work for the year is done,
 Thy master comes for the spoil ;
 Woe then for thee, thou busy, busy bee !

SOUTHEY.

a-broad' (*a-brōd'*)*work'-ing**sil-ence**rīsen* (*rīzn*)*hōard-ing**en-joy'*

be-times' (*bē-tīms*), early, in
 good time.

ever he can. Lat. *miser*,
 "wretched."

mī-ser, one that hoards, or lays
 up, as much money as

em-ploy', work, business.

in-tēnt, eager, with mind fixed.

THE CALIFORNIAN GRIZZLY.

THE grizzly bear is the largest and most formidable of the quadrupeds of California. He grows to be four feet high and seven feet long, with a weight, when very large and fat, of two thousand pounds, being the largest of the carnivorous animals, and much heavier than the lion or tiger ever get to be, but ordinarily does not exceed eight or nine hundred pounds in weight. In colour the body is a light greyish-brown, dark brown about the ears and along the ridge of the back, and nearly black on the legs. The hair is long, coarse, and wiry, and stiff on the top of the neck and between the

shoulders. The "grizzly," as he is usually called, is more common in California than any other kind of bear, and was at one time exceedingly numerous for so large an animal; but he offered so much meat for the hunters, and did so much damage to the farmers, that he has been industriously hunted, and his numbers have been greatly reduced. He ranges throughout the State, but prefers to make his home in the chaparral or bushes, whereas the black bear likes the heavy timber. The grizzly is very tenacious of life, and he is seldom immediately killed by a single bullet. His thick, wiry hair, tough skin, heavy coats of fat when in good condition, and large bones, go far to protect his vital organs; but he often seems to preserve all his strength and activity for an hour or more after having been shot through the lungs and liver with large rifle balls. He is one of the most dangerous animals to attack. There is much probability that when shot he will not be killed outright. When merely wounded he is ferocious; his weight and strength are so great that he bears down all opposition before him; and he is very quick, his speed in running being nearly equal to that of the horse. In attacking a man, he usually rises on his hind legs, strikes his enemy with one of his powerful fore-paws, and then commences to bite him. If the man lies still with his face down, the bear will usually content himself with biting him for a while about the arms and legs, then go off a few steps, and after watching him a short time, will go away. But let the man move, and the bear is upon him again; let him fight, and he will be in imminent

danger of being torn to pieces. About half a dozen men, on an average, are killed yearly in California by grizzly bears, and as many more are cruelly mutilated.

Fortunately the grizzly bear is not disposed to attack man, and never makes the first assault, unless driven by hunger or maternal anxiety. The dam will attack



any man who comes near her cubs, and on this account it is dangerous to go in the early summer afoot through chaparral where bears make their home. Usually a grizzly will get out of the way when he sees or hears a man, and sometimes, but rarely, will run when wounded. It is said that grizzlies, in seasons of scarcity, used to

break into the huts of the Indians and eat them. No instance of this kind, however, has been reported for some years past.

The greater portion of the food of the grizzly is vegetable, such as grass, clover, berries, acorns, and roots. The manzanita, service, salmon, and whortleberries, are all favourites with him. The roots which he eats are of many different species, and it was from him that we learned the existence of a Californian truffle, very similar to the European tuber of the same name. The grizzly is very fond of fresh pork, at least after he knows its taste, which he soon learns if swine come within his reach. The farmers in those districts where the bears are abundant shut up their hogs every night in corrals or pens, surrounded by very strong and high fences, which the bears frequently tear down. After having killed a hog, if any part of the carcass is left, the grizzly will return at night and feast upon the remains until it becomes putrid. He prefers, however, the fresh pork, if it can be had. Not unfrequently the grizzly discovers the carcasses of deer, elk, and antelope, killed by hunters, who have gone off after horses to carry their game home. In such cases the hunter usually finds little left for him when he gets back. They do not like climbing, and rarely attempt to ascend trees. The grizzly, though he often moves about, and feeds in the day, prefers the night, and almost invariably selects it as the time for approaching houses, as he often does, in search of food. The cub is one of the most playful, good-humoured, and amusing

of animals. He will tumble somersaults, sit up on his haunches and box, and in some of his pranks will show a humour and intelligence scarcely inferior to that of very young children. The grizzly may easily be tamed, and it becomes very fond of its master. Adams, the Californian mountaineer and bear-hunter, trained several grizzlies so that they accompanied him in his hunting excursions, defended him against wild animals, and carried burdens for him. The meat of the young grizzly resembles pork in texture and taste, exceeding it in juiciness and greasiness; but the meat of the old he-bear is extremely strong, and to delicate stomachs it is nauseating.

J. S. HITTELL.

ðr-din-ar-i-ly

im-méd-i-ate-ly

prob-a-bil-i-ty

vè-get-a-ble

anx-i-e-ty

ac-tiv-i-ty

fer-ó-cious

ex-cùr-sion

vít-al

àv-er-age

cār-case

stòm-ach

fòr-mid-a-ble, fearsome, frightful; to be feared.

quad'-ru-peds, four-footed animals. Lat. *quattuor*, "four," and *pes* (*pedis*), "a foot."

càrn-i-vor-ous, flesh-eating. Lat. *carnem*, "flesh," and *voro*, "I devour."

in-dus-tri-ous-ly, with industry, with steady, hard work.

re-duced, brought down, made less. Lat. *re*, "back," and *duco*, "I lead."

ten-á-cious, holding firmly to anything. Lat. *tenacem*, from *teneo*, "I hold."

im-min-ent, lit. projecting upon, leaning as if going to fall upon; very near, just going to happen. Lat. *im* (*in*), "in, upon," and *mineo*, "I project, or jut out."

mu'-til-ate, maim, mangle, cut or tear, or break, so as to make imperfect.

as-sault' (*as-sòlt*), attack, sudden

and violent ; lit. leaping upon. Lat. *ad*, "to, upon," and *saltum*, "to leap."

ma-tèr-nal, motherly, of a mother. Lat. *mater*, "mother."

màn-za-ní-ta, lit. "little apple" (Spanish, *manzana*, "an apple"); "a dense, clump-like shrub, which grows as high as twelve feet and nearly as broad as it is high. It bears a pinkish-white blossom in clusters, and these are replaced by round, red berries about half an inch in diameter, with a pleasant acidulous taste." (Hittell).

sér-vice, the mountain ash.

trif-fle, a fleshy, roundish fungus growing underground.

tu'-ber, lit. a hump, swelling, or little knob ; a thick, round, underground stem—as potato, turnip, &c.

pu'-trid, rotten, decayed.

in-vár-i-a-bly, without changing, regularly.

sòm-er-set, or "somersault," a leap, heels over head. A corrupted form from French *soubresaut*. Lat. *supra*, "over," and *saltus*, "a leap."

in-tèl-li-gence, understanding, capacity to know and to think.

nau'-se-ate, to cause disgust. "Nausea" is lit. "sea-sickness." Greek *naus*, "a ship."

THE WELL OF ST. KEYNE.

A WELL there is in the west country,
And a clearer one never was seen ;
There is not a wife in the west country
But has heard of the Well of St. Keyne.

An oak and an elm-tree stand beside,
And behind doth an ash-tree grow,
And a willow from the bank above
Drops to the water below.

A traveller came to the Well of St. Keyne;
Joyfully he drew nigh,
For from cock-crow he had been travelling,
And there was not a cloud in the sky.
He drank of the water so cool and clear,
For thirsty and hot was he,
And he sat down upon the bank
Under the willow-tree.

There came a man from the house hard by
At the Well to fill his pail;
On the Well-side he rested it,
And he bade the stranger hail.

"Now art thou a bachelor, stranger?" quoth he,
"For an if thou hast a wife,
The happiest draught thou hast drunk this day
That ever thou didst in thy life.

"Or has thy good woman, if one thou hast,
Ever here in Cornwall been?
For an if she have, I'll venture my life
She has drunk of the Well of St. Keyne."

"I have left a good woman who never was here,"
The stranger he made reply;
"But that my draught should be the better for that,
I pray you tell me why."

"St. Keyne," quoth the Cornishman, "many a time
Drank of this crystal Well,
And before the Angel summoned her
She laid on the water a spell.

"If the Husband of this gifted Well
 Shall drink before his Wife,
 A happy man henceforth is he,
 For he shall be master for life.

"But if the Wife should drink it first,
 God help the Husband then!"
 The stranger stooped to the Well of St. Keyne,
 And drank of the water again.

"You drank of the Well, I warrant, betimes?"
 He to the Cornishman said;
 But the Cornishman smiled as the stranger spake,
 And sheepishly shook his head.

"I hastened as soon as the wedding was done,
 And left my wife in the porch;
 But 'faith she had been wiser than me
 For she took a bottle to Church."

SOUTHEY.

<i>trà-vel-ler</i>	<i>vèn-ture</i>	<i>re-ply'</i>
<i>joy'-ful-ly</i>	<i>crys'-tal</i>	<i>be-tîmes</i>
<i>bàch-el-or</i>	<i>sùm-moned</i>	<i>sheep'-ish-ly</i>
<i>draught (dràft)</i>	<i>war'-rant (wòr-rant)</i>	

St. Keyne. A virgin daughter of a prince of Brecknockshire. She is said to have died in the year 490. Her festival used to be celebrated in Brecknockshire on October 8.

an if, an old form; sometimes also written "and if." "An" or "and" means "if;" so that "an if" is "if if," or "if indeed."

Tell the story in your own words.

HOW THE ROMANS CONQUERED BRITAIN.

THE first people who lived in the Isle of Britain of whom we really know anything were the Celts, that is to say, the Irish and the Welsh; and the first people of whom we know anything in that part of the island which is called England were the Welsh or Britons. But we know very little of the times when the Welsh lived in Britain as their own land, before the Romans conquered them. There are a great many strange stories told about their history, but nothing was written about these things till hundreds of years after the times when they were said to have happened. Therefore we cannot really believe anything that is told us about them.

The time when we first begin really to know anything about Britain is between fifty and sixty years before the birth of our Lord Jesus Christ. At that time the greatest people in the world were the Romans. These were originally the people of the city of Rome in Italy. They were not so bold at sea as the Phœnicians, nor were they so clever and learned a people as the Greeks. They could not build such fine temples, or carve such beautiful statues, or make such eloquent speeches and poems as the Greeks could; but they were the best soldiers and the wisest law-makers that the world ever saw. Thus they were able gradually to conquer, first

all Italy, and then nearly all the world that they knew of, that is, all the countries round about the Mediterranean Sea. The people of Italy they gradually admitted to the same rights as themselves, so that at the time of which I am speaking, every Italian was reckoned as a Roman; but the lands out of Italy they made into *Provinces*, and the people of those lands were their subjects. There was no King in Rome, but the people of the Provinces had to obey the laws made by the Senate and People of Rome, and were governed by the magistrates whom the Romans sent to rule over them.

At this time the Roman governor in Gaul—that is, roughly, the country that we now know as France and Belgium—was named Caius Julius Cæsar. He is one of the most famous men in the whole history of the world. In many things he was a very bad man, and he thought more of his own greatness than of the good of his country; but there was much in him which made men love him, and as a soldier and a ruler hardly any man has ever been greater. Before his time the Roman Province of Gaul was only a small part of the country; Cæsar gradually conquered all Gaul, and he next wished to conquer Britain also, as it was so near Gaul, with only a narrow arm of the sea between them. He twice came over to Britain with his army, but he only visited the southern part of the island, and he cannot be said to have conquered any part of it. Britain did not become a Roman Province, nor did Cæsar leave any Roman governor or Roman soldiers

behind him. Still this coming over of Cæsar to Britain was a very important event. From that time Britain became much more known to the rest of the world than it had ever been before. Now that Cæsar had conquered all Gaul, parts of Britain could be seen from parts of the Roman dominions. A great deal more trade went on between Britain and other countries than had ever gone on before. And men at Rome often thought and spoke of making Britain a Roman Province as well as Gaul ; but it was not till a good many years after Cæsar's time that this was really done.

Augustus, the first of the Roman Emperors and grand-nephew of Cæsar, several times spoke of conquering Britain ; but he never did it, and he never really tried to do it. His successor, Tiberius, said that the Empire was large enough already. It was the third Emperor, Caius (who is sometimes called Caligula), who first professed to go and conquer the island of which men had heard so much ; but Caius was a very foolish and bad prince, or rather, to speak the truth he was downright mad. He did all sorts of silly things ; he gave himself out for a god, and appointed priests to worship him—one of the priests being himself, and another his favourite horse. He was so fond of this horse that he was going to make him Consul or chief magistrate of Rome, when happily the horse died. You may suppose that such a man was not likely to conquer Britain or to do any other great thing. All that he did was to take an army to the coast of Gaul, near the town of Boulogne. There he set sail in a ship, but at once came back again.

The story says that he gave out that he had conquered the Ocean, and ordered his soldiers to fill their helmets with shells and to take them home by way of plunder. This was in the year A.D. 40, ninety-five years after the great Cæsar had first come over to Britain.



It was in the time of the fourth Emperor Claudius, that any part of Britain was first really conquered. Claudius himself came over in the year A.D. 43, and after him his generals, Plautius and Ostorius, went on with the war. There were then many tribes in Britain under

different chiefs, and sometimes some submitted while others still held out. The British chief who held out the longest and the most bravely was Caradoc, whom the Romans called Caractacus. He was King of the Silurians, who lived in South Wales and the neighbouring parts. Caradoc and his people withstood the Romans bravely for several years, but at last he was defeated in a great battle, and he and his family were taken prisoners and led to Rome. When Caradoc saw that great and splendid city, he wondered that men who had such wealth and grandeur at home should come and meddle with him in his poor cottage in Britain. He was taken before the Emperor, who received him kindly, and gave him his liberty, and, according to some writers, allowed him still to reign in part of Britain as a prince subject to Rome. The Romans had very often before this put captive kings and generals to death, so that Claudius' kind treatment of Caradoc was really much to his honour.

After the time of Caradoc the war between the Romans and the Britons went on. Many parts of the island were still not conquered, and in those that were conquered, the ill-treatment of the Romans sometimes made the people revolt; that is, they took up arms to try and drive the Romans out of the country. In particular there was one Boadicéa, the widow of a King of the Icenians, who lived in what is now Norfolk and Suffolk, who made a great revolt against the Romans in the year 61, in the reign of the wicked Emperor Nero. The Roman governor Suetonius was

then at the other side of the island, fighting in Mona or Anglesey. Boadicea and her people were thus able to defeat the Romans for a while, and to destroy several of the towns where they lived. Among these was London, which was already a place of much trade; others were Verulam, near St. Alban's, and Camalodūnum, now called Colchester. You will understand that the Romans lived chiefly in towns, while the Britons, like all wild people, kept to the open country. So to attack and destroy the towns was to do the Romans the greatest harm that they could. Boadicea was a brave woman; she stood with a spear in her hand and a gold collar round her neck, and with her long hair streaming down, telling her people to fight well and to avenge all that they had suffered at the hands of the Romans. But though they were successful for a while, they could not stand long against the Roman soldiers, who knew how to fight so much better than they. When Suetonius came back, there was a great battle near London; the Britons were quite defeated; Boadicea killed herself, and so the war in that part of the island came to an end.

The man who at last really conquered Britain was Julius Agricola, who was the Roman commander in the island from 78 to 84. He was a good man as well as a brave soldier, and he did all he could to civilise the people as well as to conquer them. He got further to the north than any Roman had done before him, and we may say that the Roman dominions now reached up to the line between the Firths of Forth and Clyde

in Scotland. If you look at your map, you will see that this is one of the points where the Isle of Britain is narrowest, much narrower than it is in any part of England, and narrower than most parts of Scotland. Along this line Agricola built a chain of forts, that is, a number of small castles, to defend the Roman Province against the wild people in the north of Britain, who were never fully conquered. Agricola made several campaigns further into Caledonia, as Scotland was then called, and he sailed round the north of the island and found out the Orkneys, which before were hardly known. But the part of Britain north of Agricola's forts was never really conquered; there was always fighting along the border, and the barbarians sometimes got further south into the Province itself.

Thus all Britain, except the northern part of Scotland, was conquered by the Romans, and it remained a Roman Province for more than three hundred years. The land was now ruled by Roman governors; sometimes the Roman Emperors themselves came over into Britain, and sometimes Emperors were chosen by the soldiers in Britain. The Britons soon found that it was better to submit quietly than to try to get rid of a yoke which they could not really cast off. So we may say that the whole country became Roman. Many Romans doubtless came to live in Britain, and many of the Britons tried to make themselves as much like Romans as they could. They learned to speak Latin, and to dress and live in the same way that the Romans did. Towns were built all over the country and roads were made from one town

to another; for the Romans were amongst the best builders and the best road-makers that ever were in the world. Many remains of Roman walls and other buildings are still found, sometimes in towns which are still inhabited, and sometimes in places which are now deserted. Thus there are pieces of Roman work at Caerleon, Caerwent, Leicester, Lincoln, and many other towns, and also at places which are now forsaken, like Pevensey in Sussex and Burgh Castle in Suffolk. The Romans could not build such beautiful buildings either as the Greeks built before them or as Englishmen and Frenchmen have built since, but for building things which would last no people ever did better.

If we reckon from the first coming over of Claudius, we may say that Britain was a Roman Province from 43 to 410; that is, 367 years.

E. A. FREEMAN (adapted.)

<i>còn-quered</i>	<i>or-ì-gin-al-ly</i>	<i>péo-ple</i>
<i>hìs-to-ry</i>	<i>grdd-u-al-ly</i>	<i>sól-diers</i>
<i>ré-al-ly</i>	<i>Med-i-ter-rá-ne-an</i>	<i>south'-ern</i>
<i>vìs-it-ed</i>	<i>I-tál-i-an</i>	<i>with-stood'</i>
<i>suc-cèss-or</i>	<i>neigh'-bour-ing</i>	<i>a-vènge</i>
<i>com-mènd-er</i>	<i>in-hàb-it-ed</i>	<i>ndr-row</i>

Phœ-ni-cians, the people of Carthage, a city and district in the north of Africa, on the Mediterranean Sea. This was the chief settlement formed by colonists from Phœnicia, a district of Syria,

bordering on the Mediterranean; hence the name. *stát-ue*, a figure representing a living being, carved out of some solid substance, as marble, bronze, &c. Lat. *statua*, from *statuo*, "I set up."

é-lo-quent, able to speak powerfully. Lat. *e* (*ex*), "out," and *loquor*, "I speak."

ad-mit-ted, received, took in, let in. Lat. *ad*, "to," and *mitto*, "I send."

reck-oned, counted, numbered, considered.

Prò-vince, district, territory (looked after or administered from Rome). Lat. *provincia* (for *providentia*), from *pro*, "before," and *video*, "I see."

sèn-ate, the parliament. Lat. *senátus*, "the council of the elders," from *senex*, "old, aged."

mà-gis-trates, ruling officers. Lat. *magistratus*, from *magister*, "a master."

do-min-ions, territories, districts

(governed or ruled). Lat. *dominium*, "the right of ownership," from *dominus*, "lord, master."

ém-per-or, sovereign. French, *empereur*. Lat. *imperatorem*, "commander," from *impero*, "I command."

sub-mit-ted (themselves, or their power, or their persons), yielded, gave up. Lat. *sub*, "under," and *mitto*, "I send."

civ-il-ize, to make *civil*, to render less barbarous or savage. Lat. *civilis*, "of or belonging to a *civis*, or citizen."

cam-paign (*-pán*), a fighting expedition; the time or season when an army is on service, or in the field. Lat. *campus*, "a plain, an open field."

BOADICEA.

WHEN the British warrior Queen,
Bleeding from the Roman rods,
Sought, with an indignant mien,
Counsel of her country's gods,

Sage beneath the spreading oak
Sat the Druid, hoary chief;
Every burning word he spoke
Full of rage and full of grief.

“Princess ! if our aged eyes
 Weep upon thy matchless wrongs,
’Tis because resentment ties
 All the terrors of our tongues.
“Rome shall perish—write that word
 In the blood that she has spilt ;



Perish, hopeless and abhorr'd,
 Deep in ruin as in guilt.
“Rome, for empire far renown'd,
 Tramples on a thousand states ;
Soon her pride shall kiss the ground—
 Hark ! the Gaul is at her gates !

" Other Romans shall arise,
Heedless of a soldier's name ;
Sounds, not arms, shall win the prize,
Harmony the path to fame.

" Then the progeny that springs
From the forests of our land,
Arm'd with thunder, clad with wings,
Shall a wider world command.

" Regions Cæsar never knew
Thy posterity shall sway ;
Where his eagles never flew,
None invincible as they."

Such the bard's prophetic words,
Pregnant with celestial fire,
Bending as he swept the chords
Of his sweet but awful lyre.

She, with all a monarch's pride,
Felt them in her bosom glow :
Rush'd to battle, fought, and died ;
Dying, hurl'd them at the foe.

Ruffians, pitiless as proud,
Heaven awards the vengeance due ;
Empire is on us bestow'd,
Shame and ruin wait for you.

COWPER.

war'-ri-or
in-dĕg-nant
hār-mon-y

pro-phēt-ic
mōn-arch
pīt-i-less

vēnge-ance
be-stowed'
wrongs (rōngz)

mien (*mén*), manner, bearing, aspect. French, *mine*, "air, look."

Drú-id, priest, or wise man, among the ancient Gauls and Britons. Lat. *druīdes*; connected with Greek *drus*, "the oak." They regarded the oak as sacred, and performed sacrifices and other religious rites under its shade, or in oak groves.

re-sent-ment, deep feeling of injury; indignation, anger. Lat. *re*, "back, again," and *sentio*, "I feel."

ab-hōr, detest, hate, and shrink away from. Lat. *ab*, "from, away," and *horreo*, "I stand erect, shudder at."

the Gaul, &c. In the fifth century after Christ, the Roman Empire was overthrown by barbarous tribes from the north of Europe.

prō-gen-y, offspring. Lat. *pro-genies*, from *pro*, "before, forth," and *gen-*, "to beget, to bring forth, produce."

regions. In full: "regions that Cæsar never knew."

post-ēr-i-ty, those that come after, descendants, successors. Lat. *posteritas*, from *posteri*, from *post*, "after." *sway*, rule, govern. Shall sway—what?

eagles. The device on the principal Roman standards was an eagle.

"*None invincible as they.*" Express this in full.

in-vin-ci-ble, unconquerable, not to be overcome or defeated. Lat. *in*, "not," and *vincibilis*, "easy to conquer," from *vinco*, "I conquer."

prē-gnant, full of. Lat. *præ-gnans* (for *prægnens*), "big with young," from *præ*, "before," and *gigno*, "I beget, bring forth." Compare "progeny" above.

cel-est-ial, heavenly. Lat. *cælum*, "heaven."

chords, strings.



RIDING TO CHURCH.

TOWARDS the end of the week we received a card from the two ladies, in which, with their compliments, they hoped to see all our family at church the Sunday following. All Saturday morning I could perceive, in consequence of this, my wife and daughters in close conference together, and now and then glancing at me with looks that betrayed a latent plot. To be sincere, I had strong suspicions that some absurd proposal was preparing for appearing with splendour the next day. In the evening they began their operations in a very regular manner, and my wife undertook to conduct the siege. After tea, when I seemed in spirits, she began

thus:—"I fancy, Charles, my dear, we shall have a great deal of good company at our church to-morrow."—"Perhaps we may, my dear," returned I, "though you need be under no uneasiness about that; you shall have a sermon whether there be or not."—"That is what I expect," returned she; "but I think, my dear, we ought to appear there as decently as possible, for who knows what may happen?"—"Your precautions," replied I, "are highly commendable. A decent behaviour and appearance in church is what charms me. We should be devout and humble, cheerful and serene."—"Yes," cried she, "I know that; but I mean we should go there in as proper a manner as possible; not altogether like the scrubs about us."—"You are quite right, my dear," returned I, "and I was going to make the very same proposal. The proper manner of going is to go there as early as possible, to have time for meditation before the service begins."—"Phoo, Charles," interrupted she, "all that is very true; but not what I would be at: I mean, we should go there genteelly. You know the church is two miles off, and I protest I don't like to see my daughters trudging up to their pew all blowzed and red with walking, and looking for all the world as if they had been winners at a smock race. Now, my dear, my proposal is this: there are our two plough horses, the colt that has been in our family these nine years, and his companion Blackberry, that has scarcely done an earthly thing for this month past. They are both grown fat and lazy. Why should not they do something as well as we? And let me

tell you, when Moses has trimmed them a little, they will cut a very tolerable figure."

To this proposal I objected that walking would be twenty times more genteel than such a paltry conveyance, as Blackberry was wall-eyed, and the colt wanted a tail; that they had never been broke to the rein, but had a hundred vicious tricks; and that we had but one saddle and pillion in the whole house. All these objections, however, were overruled; so that I was obliged to comply. The next morning I perceived them not a little busy in collecting such materials as might be necessary for the expedition; but, as I found it would be a business of time, I walked on to the church before, and they promised speedily to follow. I waited near an hour in the reading desk for their arrival; but not finding them come as I expected, I was obliged to begin, and went through the service, not without some uneasiness at finding them absent. This was increased when all was finished, and no appearance of the family. I therefore walked back by the horseway, which was five miles round, though the footway was but two, and, when I got about half-way home, perceived the procession marching slowly forward towards the church; my son, my wife, and the two little ones exalted on one horse, and my two daughters upon the other. I demanded the cause of their delay; but I soon found by their looks they had met with a thousand misfortunes on the road. The horses had at first refused to move from the door, till Mr. Burchell was kind enough to beat them forward for about two hundred

yards with his cudgel. Next, the straps of my wife's pillion broke down, and they were obliged to stop to repair them before they could proceed. After that, one of the horses took it into his head to stand still, and neither blows nor entreaties could prevail with him to proceed. He was just recovering from this dismal situation when I found them; but perceiving everything safe, I own their present mortification did not much displease me, as it would give me many opportunities of future triumph, and teach my daughters more humility.

GOLDSMITH.

<i>còm-pli-ments</i>	<i>un-eas-i-ness</i>	<i>con-vey'ance</i>
<i>sus-pi-cion</i>	<i>com-mend-a-ble</i>	<i>vì-cious</i>
<i>pro-pós-al</i>	<i>be-háv-i-our</i>	<i>pro-cess-ion</i>
<i>tòl-er-a-ble</i>	<i>trí-umph</i>	<i>hu-míl-i-ty</i>
<i>re-céive</i>	<i>trúdgíng</i>	<i>right (rít)</i>
<i>per-céive</i>	<i>cúdgel</i>	<i>plough (plou)</i>
<i>síege (séj)</i>		<i>daughter (dōter)</i>

còn-se-quence, result, what follows and springs from a previous fact. Lat. *con*, "together," and *sequor*, "I follow."

còn-fer-ence, the bringing together of opinions, talking over a matter, discussion. Lat. *con*, "together," and *fero*, "I bring."

be-tray', to give over (to an enemy or opponent) what

it is not intended that he should have or know.

lát-ent, lying hid, present but not seen, undiscovered.

dé-cent-ly, becomingly, as becomes one, in a proper manner. Lat. *decet*, "it is fitting, or proper."

pre-cau'tions, measures taken beforehand. Lat. *præ*, "before," and *cautum*, "to take care."

ex-alt-ed, lifted up high. Lat.
ex, "out," and *altus*, "high."
mòr-ti-fi-cá-tion, chagrin, great
 disappointment and vexa-

tion. Lat. *mortificatio*, "kill-
 ing, death," from *mortem*,
 "death," and *facere*, "to
 make, cause."

THE MINSTREL BOY.

THE minstrel boy to the war is gone,
 In the ranks of death you'll find him,
 His father's sword he has girded on,
 And his wild harp slung behind him.
 "Land of song!" said the warrior bard,
 "Though all the world betrays thee,
One sword, at least, thy rights shall guard,
One faithful harp shall praise thee!"
 The minstrel fell!—but the foeman's chain
 Could not bring his proud soul under;
 The harp he loved ne'er spoke again,
 For he tore its chords asunder;
 And said, "No chains shall sully thee,
 Thou soul of love and bravery;
 Thy songs were made for the pure and free,
 They shall never sound in slavery!"

MOORE.

THE NORTHUMBERLAND COAL-MINES.

OF all the coal-fields in England, Northumberland and Durham coal-field is the most important. It extends

as far north as the river Coquet, and as far south as the Tees. For the most part it extends quite to the margin of the sea on the east, while on the west it reaches about ten miles beyond a line drawn north and south through Newcastle. Throughout this district the coal strata "dip" or descend towards the east, and crop out or ascend towards the west. At one point a particular seam, called the High Main, lies at a depth of nearly a thousand feet; while at other spots the same seam rises nearly to the surface. Throughout the greater part of the coal-field the various beds of coal amount to upwards of eighty, consisting of alternating beds of coal, sandstone, and slate-clay. The thickness of the whole is about sixteen hundred feet—equal to nearly five times the height of St. Paul's Cathedral. All these seams of coal have different names. The two most important are called High Main and Low Main. They are each about six feet in thickness; the latter lies three or four hundred feet below the former, and eight seams of lesser thickness intervene between them. It is calculated that the entire aggregate thickness of workable coal is about thirty feet.

To those deep-lying coals we must ask the reader to pay a visit. Stepping into a basket, or a large iron tub, we are lowered by means of very strong ropes or chains. Arrived at the bottom of the pit, what do we see? Nothing, or nothing but darkness visible: all vestige of daylight is effectually shut out, and it is long before we become accustomed to the light of the candles carried by the men. Each one appears as a mere spark,

a point of light in the midst of intense darkness, for the walls or surfaces around are too dark to reflect much of the light. By degrees, however, the eye accommodates itself to the strange scene; and men are seen to be moving about in galleries or long passages, working in positions which would seem enough to break the back of an ordinary workman; while boys and horses are seen to be aiding in bringing the coal to the mouth of the pit. Some of those horses go through the whole of their career without seeing the light of day: they are born in the pit, reared in the pit, and die in the pit.

A coal-mine is not simply a pit with coal at the bottom of it. The pit is merely an entrance, from the bottom of which passages run out in every direction to a great distance. Those passages are cut in a "seam" of coal, and are a natural result of the mode of working the coal. If the whole of a seam of coal were worked away at once, the cavity left would be so large that the earthen roof, failing of support, would fall, burying all beneath it. There are portions left, therefore, called "pillars," to support the roof; and the self-interest of the coal-owner leads him to limit the size of these pillars as much as is consistent with safety. Passages lead between and around and among these pillars; and iron tramways are laid along the passages, to make it easy to move the tubs of coal from the workings to the shaft.

With regard to working the coal, the pitmen are obliged to adopt different methods according to the thickness of the seam. In ordinary cases the hewer

cuts with his pick a horizontal line at the bottom of the seam, to an extent of twelve or eighteen inches in front of him, and to this extent the coal is severed from the ground beneath. He then makes a few cuts upwards, to isolate the coal into huge blocks, which still adhere at the back and top to the general mass. The driving in



of a few wedges, or the application of gunpowder as a blast, soon brings down these blocks, in a more or less broken state.

The seams of coal, and the apertures where such seams have been, often give out gases, which, when mixed with common air, become very explosive. Hence it is important to drive these gases out of the mine as

quickly as possible, and this can be effected only by sending a constant current of air through the working. A complete system, as now adopted at the best collieries, comprises the *downcast-shaft*, for the descent of fresh air; the *upcast-shaft*, for the ascent of vitiated air; well-planned galleries, doors, and valves, throughout the whole of the mine; and a furnace at the bottom of the upcast-shaft to heat the ascending air, and make it ascend more rapidly. In some collieries the air is made to traverse an extent of thirty miles of galleries and passages. In former times, the dangerous contaminated passages were lighted only by sparks struck from a small instrument called a "steel mill," but the beautiful safety-lamp, or "Davy," as the miners familiarly term it, has superseded this. In this lamp there is a lamp-flame surrounded by a wire-gauze having very fine meshes, through which the air must pass to feed the flame; if the air be inflammable, the flame is confined within the gauze envelope. If the lamp be properly tended, it is one of the most precious boons that science ever gave to industry; if it be neglected, as it often is by the miners, those explosions take place which so frequently give rise to such fearful results.

The *hewer* is the actual coal-digger. Whether the seam be so narrow that he can hardly creep into it on hands and knees, or whether it be tall enough to stand upright in, he is the responsible workman who loosens the coal from its bed.

The *putter* drags the coal from the working to the passages, where horses are able to be employed in the

work. The crane-man manages the crane by which the great baskets of coal are transferred to the waggons. The *viewer* is the officer who is responsible for the work, and so on; for, as the reader has here means of observing, the colliers are not merely blackened-faced diggers and shovellers, who attack the coal wherever they meet with it, and roam about in a dark pit to seek their coaly fortunes. All is pre-arranged and systematic; every one knows exactly whither he is to go, and what he is to do.

The Land we Live in.

<i>mār-gin</i>	<i>ar-rânge-ment</i>	<i>ndt-ÿr-al</i>
<i>through-out'</i>	<i>cir-cùm-fer-ence</i>	<i>hor-i-zòn-tal</i>
<i>par-tic-ÿl-ar</i>	<i>vïs-i-ble</i>	<i>eight'-een</i>
<i>con-sist-ing</i>	<i>ac-cûs-tomed</i>	<i>in-dus-try</i>
<i>còl-li-er-y</i>	<i>ac-còm-mod-ate</i>	<i>re-spòn-si-ble</i>
<i>work'-a-ble</i>	<i>gàll-er-y</i>	<i>trans-fèrred</i>

de-scènd, go down. Lat. *de-scendo*, from *de*, "down," and *scando*, "I climb."

a-scènd, go up. Lat. *ascendo*, from *ad*, "to," and *scando*, "I climb."

cath-éd-ral, the principal church within a bishop's see, or district. Lat. *cathedra*, from Greek, *kathedra*, "a seat, chair;" from *kata*, "down," and *hedra*, "a seat."

àg-greg-ate, total; all the parts collected into one mass. Lat. *ag (ad)*, "to," and *gre-*

gatum, "to flock," from *grex (greg-)*, "a flock, herd."

vès-tige, trace, track, mark. Lat. *vestigium*, "footstep, foot-mark."

ef-fèct-ÿ-al-ly, successfully, so that the effect is gained; completely.

càv-i-ty, hollow, hole. Lat. *cavus*, "hollow."

con-sist-ent, agreeing with; not opposed to. Lat. *consistens*, from *con*, "together," and *sisto*, "I set, place, or stand."

méth-od, plan, way.

i-sol-ate, separate, place apart.

Strictly, "to place as in an island;" from Ital. *isola* (= Lat. *insula*), "an island."

ad-hère, stick to, cling to. Lat. *ad*, "to," and *hæreo*, "I stick."

à-per-ture, opening, hole, gap.

Lat. *apertura*, from *ab*, "away, from," and *pario*, "I bring to light."

ex-pló-sive, ready to explode, bursting out with great force, and noise. Lat. *ex*, "out, forth," and *plausum* (or *plo-sum*), "to clap, beat, stamp."

vi-ti-ate (*vi-shi-ate*), to spoil, to

render hurtful. Lat. *vitium*, "vice, fault."

con-tâm-in-ate, to come into contact with, and thus to spoil, vitiate, corrupt. Lat. *contaminatum*, from *contamen* (for *contagimen*), from *con*, "together," and *tango* (*tag-*), "I touch."

Davy. So called from the name of the inventor, Sir Humphrey Davy.

su-per-sède, take the place of. Lat. *super*, "over, above," and *sedeo*, "I sit."

in-flâm-ma-ble, ready to be set in flames, or to take fire. Lat. *flamma*, "flame."

A MINER HERO.

IN a certain Cornish mine, two miners, deep down in the shaft, were engaged in putting in a shot for blasting. They had completed their affair, and were about to give the signal for being hoisted up. One at a time was all the assistant at the top could manage, and the second was to kindle the match, and then mount with all speed.

Now it chanced, while they were still below, that one of them thought the match too long. He accordingly tried to break it shorter. Taking a couple of stones,

a flat and a sharp, he succeeded in cutting it the required length ; but, horrible to relate, he kindled it at the same time, while both were still below ! Both shouted vehemently to the man at the windlass ; both sprang at the basket. The windlass man could not move it with both in it.



Here was a moment for poor Miner Jack and Miner Will ! Instant, horrible death hangs over them. Will generously resigns himself. " Go aloft, Jack ; sit down ; away ! in one minute I shall be in heaven ! "

Jack bounds aloft, the explosion instantly follows, bruising his face as he looks over ; but he is safe above ground.

And what of poor Will? Descending eagerly, they find him, as if by a miracle, buried under rocks which had arched themselves over him. He is little injured. He too is brought up safe. Well done, brave Will!

CARLYLE.

(With permission of Messrs. Chapman and Hall.)

en-gaged

hòr-ri-ble

ex-plò'-sion

in-jured

ea'-ger-ly

bruis'-ing

as-sist-ant, helper. Lat. *as* (*ad*),

re-signs, gives up.

"to," and *sisto*, "I place or stand."

mir-a-cle, wonder; marvellous circumstance, beyond the

gèn-er-ously, with noble and kind regard for his friend.

power of man to do. Lat. *miror*, "I wonder."

EVENING BELLS.

THOSE evening bells! those evening bells!
How many a tale their music tells
Of youth, and home, and that sweet time
When last I heard their soothing chime.

Those joyous hours are passed away;
And many a heart that then was gay
Within the tomb now darkly dwells,
And hears no more those evening bells.

And so 'twill be when I am gone;
That tuneful peal will still ring on,
While other bards shall walk these dells,
And sing your praise, sweet evening bells!

MOORE.

HOW THE RAJAH TOOK THE CENSUS.

1. THE RAJAH'S DIFFICULTY.

THE Rajah of Lombock was a very wise man, and he showed his wisdom greatly in the way he took the census. For my readers must know that the chief revenues of the rajah were derived from a head-tax of rice, a small measure being paid annually by every man, woman, and child in the island. There was no doubt that every one paid this tax, for it was a very light one, and the land was fertile and the people well off; but it had to pass through many hands before it reached the Government storehouses. When the harvest was over the villagers brought their rice to the Kapala kampong, or head of the village; and no doubt he sometimes had compassion on the poor or sick, and passed over their short measure, and sometimes was obliged to grant a favour to those who had complaints against him; and then he must keep up his own dignity by having his granaries better filled than his neighbours, and so the rice that he took to the "Waidono" that was over his district was generally a good deal less than it should have been. And all the "Waidonos" had of course to take care of themselves, for they were all in debt, and it was so easy to take a little of the Government rice, and there would still be a plenty for the Rajah. And the "Gustis" or princes who received the rice from the Waidonos helped themselves likewise, and so when the harvest was all over and the rice tribute

was all brought in, the quantity was found to be less each year than the one before. Sickness in one district, and fevers in another, and failure of the crops in a third, were of course alleged as the cause of this falling off; but when the Rajah went to hunt at the foot of the great mountain, or went to visit a "Gusti" on the other side of the island, he always saw the villages full of people, all looking well-fed and happy. And he noticed that the krisses of his chiefs and officers were getting handsomer and handsomer; and the handles that were of yellow wood were changed for ivory, and those of ivory were changed for gold, and diamonds and emeralds sparkled on many of them; and he knew very well which way the tribute-rice went. But as he could not prove it he kept silence, and resolved in his own heart some day to have a census taken, so that he might know the number of his people, and not be cheated out of more rice than was just and reasonable.

But the difficulty was how to get this census. He could not go himself into every village and every house, and count all the people; and if he ordered it to be done by the regular officers they would quickly understand what it was for, and the census would be sure to agree exactly with the quantity of rice he got last year. It was evident, therefore, that to answer his purpose no one must suspect why the census was taken; and to make sure of this, no one must know that there was any census taken at all. This was a very hard problem; and the Rajah thought and thought, as hard as a Malay Rajah can be expected to think, but could not solve it;

and so he was very unhappy, and did nothing but smoke and chew betel with his favourite wife, and eat scarcely anything; and even when he went to the cock-fight did not seem to care whether his best birds won or lost. For several days he remained in this sad state, and all the court were afraid some evil eye had bewitched the Rajah; and an unfortunate Irish captain who had come in for a cargo of rice, and who squinted dreadfully, was very near being krissed, but being first brought to the royal presence was graciously ordered to go on board and remain there while his ship stayed in the port.

<i>de-rîved</i>	<i>neigh'-bours</i>	<i>dé-a-mond</i>
<i>gòv-ern-ment</i>	<i>trî-bute</i>	<i>ém-er-ald</i>
<i>stóre-house</i>	<i>fail'-ure</i>	<i>rea'-son-a-ble</i>
<i>com-plaints'</i>	<i>hând-some</i>	<i>be-witched</i>
<i>fáv-our-ite</i>	<i>dread-fûl-ly</i>	<i>grá-cious-ly</i>

râ-jah, or *râ-jah*, king. An Indian title.

Lôm-bock, a small island in the Malay Archipelago. It is east of the small island of Bali, which lies between it and the east end of Java.

cên-sus, a numbering (of the people). Lat. *census*, from *censeo*, "I count."

rè-ven-ue, income. Lat. *re*, "back," and *venio*, "I come."

ân-nû-al-ly, yearly, every year. Lat. *annus*, "a year."

fêrt-ile, bearing fruit, productive. Lat. *fero*, *fertum*, "to bear, produce."

com-pâss-ion, pity, fellow-feeling. Lat. *com*, "together with," and *patior*, *passus*, "to feel."

dig-ni-ty, worthiness, worth; greatness, importance. Lat. *dignus*, "worthy."

grân-ar-ies, barns, storehouses.

Lat. *granaria*, "place where corn is kept, barn;" from *granum*, "a grain, seed, corn."

debt (*dēt*), what is owed, what one is liable to pay. Lat. *debitum*, from *debeo*, "I owe."

al-lèged (*-lèjd*), brought forward, asserted, declared, said to be.

kris. "Malay crooked dagger, on the beauty and value of which the Malays greatly pride themselves. The sheaths are of ornamental wood and ivory, often covered on one side with gold. The blades are beautifully veined with white

metal worked into the iron, and they are kept very carefully. Every man without exception carries a kris, stuck behind into the large waist-cloth which all wear, and it is generally the most valuable piece of property he possesses." (A. R. WALLACE.)

prò-blem, question, requiring some device or operation to solve it.

bétel is to the people of central and tropical Asia what tobacco is to other countries. The chief ingredient is the fruit of a sort of pepper plant. See further in next lesson.

2. THE RAJAH'S DEVICE.

ONE morning, however, after about a week's continuance of this unaccountable melancholy, a welcome change took place, for the Rajah sent to call together all the chiefs and priests and princes who were then in Mataram, his capital city; and when they were all assembled in anxious expectation, he thus addressed them :

"For many days my heart has been very sick and I knew not why, but now the trouble is cleared away, for I have had a dream. Last night the spirit of the 'Gunong Agong'—the great fire mountain—appeared

to me, and told me that I must go up to the top of the mountain. All of you may come with me to near the top, but then I must go up alone, and the great spirit will again appear to me and will tell me what is of great importance to me and to you and to all the people of the island. Now go all of you and make this known through the island, and let every village furnish men to make clear a road for us to go through the forest and up the great mountain."

So the news was spread over the whole island that the Rajah must go to meet the great spirit on the top of the mountain; and every village sent forth its men, and they cleared away the jungle and made bridges over the mountain streams and smoothed the rough places for the Rajah's passage. And when they came to the steep and craggy rocks of the mountain, they sought out the best paths, sometimes along the bed of a torrent, sometimes along narrow ledges of the black rocks; in one place cutting down a tall tree so as to bridge across a chasm, in another constructing ladders to mount the smooth face of a precipice. The chiefs who superintended the work fixed upon the length of each day's journey beforehand according to the nature of the road, and chose pleasant places by the banks of clear streams and in the neighbourhood of shady trees, where they built sheds and huts of bamboo well thatched with the leaves of palm trees, in which the Rajah and his attendants might eat and sleep at the close of each day.

And when all was ready, the princes and priests and

chief men came again to the Rajah, to tell him what had been done, and to ask him when he would go up the mountain. And he fixed a day, and ordered every man of rank and authority to accompany him, to do honour to the great spirit who had bid him undertake the journey, and to show how willingly they obeyed his commands. And then there was much preparation throughout the whole island. The best cattle were killed and the meat salted and sun-dried ; and abundance of red peppers and sweet potatoes were gathered ; and the tall pinang-trees were climbed for the spicy betel-nut, the sirih-leaf was tied up in bundles, and every man filled his tobacco-pouch and lime-box to the brim, so that he might not want any of the materials for chewing the refreshing betel during the journey. And the stores of provisions were sent on a day in advance. And on the day before that appointed for starting, all the chiefs both great and small came to Mataram, the abode of the king, with their horses and their servants, and the bearers of their sirih boxes, and their sleeping-mats, and their provisions. And they encamped under the tall Waringin trees that border all the roads about Mataram, and with blazing fires frightened away the ghouls and evil spirits that nightly haunt the gloomy avenues.

*wel-come**as-sèm-ble**ànx-i-ous**ex-pec-tà-tion**ad-dressed**con-struct-ing**jour'-ney**neigh'-bour-hood**at-tend-ants**ac-com'-pa-ny**po-tà-toes**pro-vi-sions*

con-tin-ù-ance, duration, lastingness. Lat. *con*, "together," and *teneo*, "I hold."

un-ac-count'-a-ble, not to be accounted for or explained; for which no reason can be given.

mèl-an-chol-y, sadness, down heartedness.

the great fire mountain. Lom-bock peak, the loftiest point of the range, is 8,000 feet high.

chasm (*kàsm*), a deep gap, a hollow, yawning space.

prè-cip-ice, a very steep place, a sudden descent. From

Lat. *præceps*, "head-foremost;" from *præ*, "before," and *caput*, "the head."

su-per-in-tend, look over, watch over, have the oversight of.

au-thòr-i-ty, power, influence.

lime-box. Lime is taken with the betel fruit.

à-ven-ue, approach-road; shady passage between rows of trees. French, *avenue*, from *ad*, "to," and *venio*, "I come."

3. THE PROCESSION TO THE MOUNTAIN.

IN the morning a great procession was formed to conduct the Rajah to the mountain. And the royal princes and relations of the Rajah mounted their black horses, whose tails swept the ground; they used no saddle or stirrups, but sat upon a cloth of gay colours; the bits were of silver and the bridles of many-coloured cords. The less important people were on small strong horses of various colours, well suited to a mountain journey; and all (even the Rajah) were bare-legged to above the knee, wearing only the gay coloured cotton waist-cloth, a silk or cotton jacket, and a large handkerchief tastefully folded round the head. Every one was attended by one or two servants bearing his sirih and betel boxes, who were also mounted on ponies; and

great numbers more had gone on in advance or waited to bring up the rear. The men in authority were numbered by hundreds and their followers by thousands, and all the island wondered what great thing would come of it.

For the first two days they went along good roads and



through many villages, which were swept clean, and where bright cloths were hung out at the windows ; and all the people, when the Rajah came, squatted down upon the ground in respect, and every man riding got off his horse and squatted down also, and many joined the procession at every village. At the place where they stopped for the night the people had placed

stakes along each side of the roads in front of the houses. These were split crosswise at the top, and in the cleft were fastened little clay lamps, and between them were stuck the green leaves of palm-trees, which, dripping with the evening dew, gleamed prettily with the many twinkling lights. And few went to sleep that night till the morning hours, for every house held a knot of eager talkers, and much betel-nut was consumed, and endless were the conjectures what would come of it.

On the second day they left the last village behind them and entered the wild country that surrounds the great mountain, and rested in the huts that had been prepared for them on the banks of a stream of cold and sparkling water. And the Rajah's hunters, armed with long and heavy guns, went in search of deer and wild bulls in the surrounding woods, and brought home the meat of both in the early morning, and sent it on in advance to prepare the midday meal. On the third day they advanced as far as horses could go, and encamped at the foot of high rocks, among which narrow pathways only could be found to reach the mountain-top. And on the fourth morning, when the Rajah set out, he was accompanied only by a small party of priests and princes with their immediate attendants; and they toiled wearily up the rugged way, and sometimes were carried by their servants, till they passed up above the great trees, and then among the thorny bushes, and above them again on to the black and burnt rock of the highest part of the mountain.

And when they were near the summit, the Rajah ordered them all to halt, while he alone went to meet the great spirit on the very peak of the mountain. So he went on with two boys only, who carried his sirih and betel, and soon reached the top of the mountain among great rocks, on the edge of the great gulf whence issue forth continually smoke and vapour. And the Rajah asked for sirih, and told the boys to sit down under a rock and look down the mountain, and not to move till he returned to them. And as they were tired, and the sun was warm and pleasant, and the rock sheltered them from the cold wind, the boys fell asleep. And the Rajah went a little way on under another rock; and he was tired, and the sun was warm and pleasant, and he too fell asleep.

And those who were waiting for the Rajah thought him a long time on the top of the mountain, and thought the great spirit must have much to say, or might perhaps want to keep him on the mountain always, or perhaps he had missed his way in coming down again. And they were debating whether they should go and search for him, when they saw him coming down with the two boys. And when he met them he looked very grave, but said nothing; and then all descended together, and the procession returned as it had come; and the Rajah went to his palace and the chiefs to their villages, and the people to their houses, to tell their wives and children all that had happened, and to wonder yet again what would come of it.

<i>re-lá-tions</i>	<i>con-súmed</i>	<i>de-bát-ing</i>
<i>stír-rup</i>	<i>sur-round'-ing</i>	<i>ac-com'-pa-nied</i>
<i>hànd-ker-chief</i>	<i>twìnk-ling</i>	<i>con-tìn-ù-al-ly</i>
<i>táste-fül-ly</i>	<i>spärk-ling</i>	<i>shèl-tered</i>

pro-cès-sion, the act of going forward; a line or train of persons or vehicles moving forwards. Lat. *pro*, "before," and *cessum*, "to go."

con-jèc-tures, guesses, suppositions. Lat. *con*, "together," and *jactum*, "to throw;" putting things together and

drawing an inference from them.

im-méd-i-ate, nearest. Lat. *im*, "not," and *medius*, "middle;" there being no middle parties between the priests and princes and those attendants of theirs.

sum-mit, top.

4. WHAT CAME OF IT.

AND three days afterwards the Rajah summoned the priests and the princes and the chief men of Mataram, to hear what the great spirit had told him on the top of the mountain. And when they were all assembled, and betel and sirih had been handed round, he told them what had happened. On the top of the mountain he had fallen into a trance, and the great spirit had appeared to him with a face like burnished gold, and had said—"O Rajah! much plague and sickness and fevers are coming upon all the earth, upon men and upon horses and upon cattle; but as you and your people have obeyed me, and have come up to my great mountain, I will teach you how you and all the people of Lombock may escape this plague." And all waited anxiously, to hear how they were to be saved from so fearful a calamity. And

after a short silence the Rajah spoke again and told them,—that the great spirit had commanded that twelve sacred krisses should be made, and that to make them every village and every district must send a bundle of needles—a needle for every head in the village. And when any grievous disease appeared in any village, one of the sacred krisses should be sent there ; and if every house in that village had sent the right number of needles, the disease would immediately cease ; but if the number of needles sent had not been exact, the kris would have no virtue.

So the princes and chiefs sent to all their villages and communicated the wonderful news ; and all made haste to collect the needles with the greatest accuracy, for they feared that if but one were wanting the whole village would suffer. So one by one the head men of the villages brought in their bundles of needles ; those who were near Mataram came first, and those who were far off came last ; and the Rajah received them with his own hands, and put them away carefully in an inner chamber, in a camphor-wood chest whose hinges and clasps were of silver ; and on every bundle was marked the name of the village and the district from whence it came, so that it might be known that all had heard and obeyed the commands of the great spirit.

And when it was quite certain that every village had sent in its bundle, the Rajah divided the needles into twelve equal parts, and ordered the best steel-worker in Mataram to bring his forge and his bellows and his

hammers to the palace, and to make the twelve krisses under the Rajah's eye, and in the sight of all men who chose to see it. And when they were finished they were wrapped up in new silk, and put away carefully until they might be wanted.

Now the journey to the mountain was in the time of the east wind, when no rain falls in Lombock. And soon after the krisses were made it was the time of the rice harvest, and the chiefs of districts and of villages brought in their tax to the Rajah according to the number of heads in their villages. And to those that wanted but little of the full amount, the Rajah said nothing; but when those came who brought only half or a fourth part of what was strictly due, he said to them mildly, "The needles which you sent from your village were many more than came from such-a-one's village, yet your tribute is less than his; go back and see who it is that has not paid the tax." And the next year the produce of the tax increased greatly, for they feared that the Rajah might justly kill those who a second time kept back the right tribute. And so the Rajah became very rich, and increased the number of his soldiers, and gave golden jewels to his wives, and bought fine black horses from the white-skinned Hollanders, and made great feasts when his children were born or were married; and none of the Rajahs or Sultans among the Malays were so great or so powerful as the Rajah of Lombock.

And the twelve sacred krisses had great virtue. And when any sickness appeared in a village one of them

was sent for; and sometimes the sickness went away, and then the sacred kris was taken back again with great honour, and the head men of the village came to tell the Rajah of its miraculous power, and to thank him. And sometimes the sickness would not go away, and then everybody was convinced that there had been a mistake in the number of needles sent from that village, and therefore the sacred kris had no effect, and had to be taken back again by the head men with heavy hearts, but still with all honour,—for was not the fault their own?

A. R. WALLACE.

dis-ease'

ex-àct

strict-ly

sá-cred

fìn-ished

in-creased'

won'-der-fùl

a-mount'

con-vìnced

plague (plág)

griev-ous (grév-us)

trànce, swoon; state in which the body is forgotten, and the mind seems to go beyond it. Lat. *transitus*, "a going beyond," from *trans*, "over, beyond," and *itum*, "to go."

bùrn-ished, made brown, made of flame colour, made bright, shining.

cal-àm-i-ty, a crushing misfortune, disaster, great unhappiness.

vir-tue, power, force. Lat.

virtus, "manly strength, virtue."

com-mun'-i-cate, share with others, give over to others, make common. Lat. *communis*, "common."

àc-cùr-à-cy, correctness, exactness. Lat. *ac (ad)*, "to," and *cura*, "care."

mir-àc-ul-ous, working miracles, or wonderful cures, cures that no human being could work.

EXERCISE.—Write out the above story in your own words, without consulting the book.



WOODMAN, SPARE THAT TREE.

WOODMAN, spare that tree,
Touch not a single bough !
In youth it sheltered me,
And I'll protect it now.
'Twas my forefather's hand
That placed it near his cot ;
There, woodman, let it stand,
Thy axe shall harm it not !
That old familiar tree,
Whose glory and renown

Are spread o'er land and sea,
 And wouldst thou hew it down ?
 Woodman, forbear thy stroke ;
 Cut not its earth-bound ties ;
 Oh, spare that aged oak,
 Now towering to the skies !

When but an idle boy,
 I sought its grateful shade ;
 In all their gushing joy
 Here too my sisters played.
 My mother kiss'd me here ;
 My father press'd my hand—
 Forgive this foolish tear,
 But let that old oak stand !

My heart-strings round thee cling,
 Close as thy bark, old friend !
 Here shall the wild-bird sing,
 And still thy branches bend.
 Old tree ! the storm still brave !
 And, woodman, leave the spot ;
 While I've a hand to save,
 Thy axe shall harm it not.

G. P. MORRIS.

bough (bou)

shel-ter

single (sing-gl)

axe (àx)

pro-tect

gló-ry

for-give

fool'-ish

fa-míl-i-ar

re-noun', glory, fame.

gráte-ful, pleasant, well-liked.

for-bear' (-bár), withhold, keep
 back.

THE MISSOURI IRON MOUNTAINS.

THE iron region of Missouri, eighty miles south of St. Louis, embraces Pilot Knob, Iron Mountain, and Shepherd's Mountain. These are eastern spurs of the Ozark hills or high tablelands which range from one thousand to one thousand five hundred feet above the sea level.

The St. Louis and Iron Mountain Railway terminates at Pilot Knob, a conical hill of solid ore, six hundred feet high, and covering three hundred and sixty acres. At the time of my visit, only two furnaces were in operation, turning out about thirty tons of pig-iron per day. The sides of the mountain are covered with oak, hickory, and ash saplings. The summit is a mass of enormous boulders fifty feet high, and upheaved into every conceivable position. Some stand erect, sharply-defined pillars. Two, a few feet apart, form a gigantic natural gateway. Another huge slab leaning against a solid wall constitutes a picturesque cave. Though exposed to the atmosphere for centuries, these boulders contain fifty per cent. of iron. Below the surface the rock contains sixty per cent.

The miners were digging horizontally into the mountain, drilling, blasting, and prying off great fragments of rock, which fell crashing over a little precipice. In the pit below some were breaking up these fragments with sledge-hammers; others loading them into cars

which conveyed the ore by an inclined-plane railway to furnaces at the base.

In European mines the clothing of workmen is carefully examined at night, to see that they do not carry away ore. But here, a few hundred blocks as large as a dwelling-house would not be missed. The labourers were French, German, and Irish.

Five miles further north is *the* Iron Mountain—a slight elevation over which the railway to St. Louis passes. Busy labourers were blasting out and breaking the ore within a few yards of the track. In 1833 this mountain was “entered” in the land-office at one dollar and a quarter an acre. Three years later the entire tract sold for six hundred dollars. Its present value is incalculable; for it is the largest and richest mass of iron yet found upon the globe. Its base covers five hundred acres. The ore, which contains seventy-one per cent. of pure iron, has been penetrated nearly four hundred feet below the surface, with no sign of exhaustion even at that depth.

In reducing, crude blocks one or two feet in diameter are placed upon a foundation of logs, in alternate layers of charcoal and ore, until they form a huge pile. For a month they are exposed to a fire as hot as they can endure without melting. This expels impurities, and leaves the ore brittle and easily broken into lumps three or four inches thick.

It is next hauled to the furnaces and cast into their fiery jaws, together with limestone and charcoal in proportions varying with its quality. The furnaces are

either "hot blast" or "cold blast," according to the strong currents of hot or cold air pumped into them to supply oxygen, without which the ore would turn to "cinder," yielding no iron. The heat is two thousand seven hundred degrees Fahrenheit.

The cinder, separating from the iron, rises to the surface of the molten mass, and is skimmed off. Some of it hardens into a dark mass resembling coke, coarse glass, or variegated marble. But when the charges and blasts are properly adjusted, it is white as snow, and like the most exquisite moss suddenly petrified.

The ore remains in the furnace some twelve hours. Then from the bottom of the great crucible it pours a red glowing stream into moulds of sand, where it hardens into "pigs." The workmen guide these dazzling currents of liquid fire into their proper channels with long-handled hoes.

By night the furnace buildings, with their brick arches, blackened roofs, clouds of smoke, fiery torrents, and sooty workmen darting hither and thither, catching lurid gleams on their dark faces, are grotesquely suggestive of Pandemonium, and contrast sharply with the white villages and dark wooded hills.

Shepherd's Mountain contains rich ore, but has been little mined.

All these iron hills are of volcanic origin. The State geologist reports in this vicinity sufficient deposits of ore near the surface to yield one million tons per annum of manufactured iron for the next two hundred years.

A. D. RICHARDSON.

<i>eight'-y</i>	<i>hor-i-zòn-tal-ly</i>	<i>im-púr-i-ties</i>
<i>sùm-mit</i>	<i>cènt-ùr-ies</i>	<i>ex-haust'-ion</i>
<i>up-heaved'</i>	<i>prè-cip-ice</i>	<i>di-à-me-ter</i>
<i>con-ceiv'-a-ble</i>	<i>con-veyed'</i>	<i>found-à-tion</i>
<i>de-fined</i>	<i>Eu-ro-pé-an</i>	<i>ex-quis-ite</i>
<i>gi-gànt-ic</i>	<i>è-lev-à-tion</i>	<i>sug-gèst-ive</i>

em-brace, fold in the arms, enclose, contain. French, *embrasser*, from *en*, "in," and *bras*, "an arm."

còn-ic-al, cone-shaped, in the form of a cone; like a sugar-loaf.

ore, metal as dug out of the earth, mixed with other substances.

e-norm-ous, unusually large, huge. Lat. *enormis*, from *e*, "out of, beyond," and *norma*, "rule."

boul'-ders (*ból-*), rounded, water-worn blocks of stone.

còn-sti-tute, form, make up. Lat. *constituo*, from *con*, "together," and *statuo*, "I set up."

pic-túr-èsque (*-èsk*), of the nature of a picture, fit to form a picture; of striking appearance.

àt-mo-sphere, the *air-sphere*; the air; the whole mass of air, clouds, and vapour surrounding the earth. Greek,

atmos, "smoke, steam, vapour," and *sphaira*, "a sphere."

per cent., contracted for Lat. *per centum*, "by the hundred." "Fifty per cent." means "fifty parts in a hundred," that is, one-half.

pry, to raise by lever, to force up or apart.

fràg-ments, bits, pieces broken off. From Lat. *frango* (*frag-*), "I break."

in-clined-plane, a *plane* or flat surface, *inclined*, or made to lean, as it were, on something. Lat. *in*, "upon," and *clino*, "I bend;" *planus*, "level, flat."

in-càl-cùl-a-ble, more than can be calculated or reckoned.

ex-pèl, drive out. Lat. *ex*, "out," and *pello*, "I drive."

àx-y-gen, lit. "acid-producer," (Greek, *oxus*, "sharp, acid," and *gennao*, "I produce"), a gas that forms the vital part of air and the principal part of water.

Fäh-ren-heit, the name of one kind of thermometer (instrument for measuring heat), so-called from the inventor of it. The freezing-point of water is marked 32°, the boiling-point 212°. In Beaumur's (*Rō-mur's*) thermometer, the freezing-point is marked 0°, and the distance up to the boiling-point is divided into 80°.

vår-i-e-gåt-ed, of various colours, speckled.

ad-just-ed, arranged exactly to suit each other.

pèt-ri-fied, turned into stone."
Lat. *petra*, "rock, stone."

crú-ci-ble, pot for melting metals. Lat. *crucibulum*.

grot-èsque-ly (*-èsk-*), oddly, whimsically, fantastically; after the absurdly fanciful manner of the ornamentation of *grottoes*.

Pan-de-món-i-um, the dwelling of all the evil spirits. Greek, *pan*, "all," and *daimon*, "a demon, or spirit."

vol-càn-ic, belonging to, or produced by, a volcano, or by fire. Lat. *Vulcanus*, Vulcan, the god of fire. Rocks made by the agency of water are called *aqueous*. Lat. *aqua*, "water."

HIAWATHA'S FRIENDS.

Two good friends had Hiawatha,
Singled out from all the others,
Bound to him in closest union,
And to whom he gave the right hand
Of his heart, in joy and sorrow;
Chibiabos the musician,
And the very strong man, Kwasind.

Straight between them ran the pathway,
Never grew the grass upon it;
Singing-birds, that utter falsehoods,

Story-tellers, mischief-makers,
Found no eager ear to listen,
Could not breed ill-will between them,
For they kept each other's counsel,
Spake with naked hearts together,
Pondering much and much contriving
How the tribes of men might prosper.

Most beloved by Hiawatha
Was the gentle Chibiabos,
He the best of all musicians,
He the sweetest of all singers.
Beautiful and childlike was he,
Brave as man is, soft as woman,
Pliant as a wand of willow,
Stately as a deer with antlers.

When he sang, the village listened ;
All the warriors gathered round him,
All the women came to hear him ;
Now he stirred their souls to passion,
Now he melted them to pity.

From the hollow reeds he fashioned
Flutes so musical and mellow,
That the brook, the Sebowisha,
Ceased to murmur in the woodland,
That the wood-birds ceased from singing,
And the squirrel, Adjidaumo,
Ceased his chatter in the oak-tree,
And the rabbit, the Wabasso,
Sat upright to look and listen.

Yes, the brook, the Sebowisha,
Pausing, said, "O Chibiabos,
Teach my waves to flow in music,
Softly as your words in singing!"

Yes, the blue bird, the Owaissa,
Envious, said, "O Chibiabos,
Teach me tones as wild and wayward,
Teach me songs as full of frenzy!"

Yes, the robin, the Opechee,
Joyous, said, "O Chibiabos,
Teach me tones as sweet and tender,
Teach me songs as full of gladness!"

And the whip-poor-will, Wawonaissa,
Sobbing, said, "O Chibiabos,
Teach me tones as melancholy,
Teach me songs as full of sadness!"

All the many sounds of nature
Borrowed sweetness from his singing;
All the hearts of men were softened
By the pathos of his music;
For he sang of peace, and freedom,
Sang of beauty, love, and longing;
Sang of death, and life undying
In the Islands of the Blessed,
In the kingdom of Ponemah,
In the land of the Hereafter.

Very dear to Hiawatha
Was the gentle Chibiabos,
He the best of all musicians,
He the sweetest of all singers;

For his gentleness he loved him,
And the magic of his singing.

Dear, too, unto Hiawatha
Was the very strong man, **Kwasind**,
He the strongest of **all mortals**,
He the mightiest **among many** ;
For his **very strength** he loved him,
For his strength allied to goodness.

Idle in his youth was Kwasind,
Very listless, dull, and dreamy,
Never played with other children,
Never fished and never hunted,
Nor like other children was he ;
But they saw that much he fasted,
Much his Manito entreated,
Much besought his Guardian Spirit.

" **Lazy Kwasind !** " said his mother,
" In my work you never help me !
In the Summer you are roaming
Idly in the fields and forests ;
In the Winter you are cowering
O'er the firebrands in the Wigwam !
In the coldest days of Winter
I must break the ice for fishing ;
With my nets you never help me !
At the door my nets are hanging,
Dripping, freezing with the water ;
Go and wring them, Yenadize !
Go and dry them in the sunshine ! "

Slowly, from the ashes, Kwasind
Rose, but made no angry answer ;
From the lodge went forth in silence,
Took the nets, that hung together,
Dripping, freezing at the doorway,
Like a wisp of straw he wrung them,
Like a wisp of straw he broke them,
Could not wring them without breaking,
Such the strength was in his fingers.

"Lazy Kwasind !" said his father,
"In the hunt you never help me ;
Every bow you touch is broken,
Snapped asunder every arrow !
Yet come with me to the forest,
You shall bring the hunting homeward."

Down a narrow pass they wandered,
Where a brooklet led them onward,
Where the trail of deer and bison
Marked the soft mud on the margin,
Till they found all further passage
Shut against them, barred securely
By the trunks of trees uprooted,
Lying lengthwise, lying crosswise,
And forbidding further passage.

"We must go back," said the old man,
"O'er these logs we cannot clamber ;
Not a woodchuck could get through them,
Not a squirrel clamber o'er them !"
And straightway his pipe he lighted,
And sat down to smoke and ponder.

But before his pipe was finished,
Lo ! the path was cleared before him ;
All the trunks had Kwasind lifted,
To the right hand, to the left hand,
Shot the pine-trees swift as arrows,
Hurled the cedars light as lances.

"Lazy Kwasind !" said the young men,
As they sported in the meadow ;
"Why stand idly looking at us,
Leaning on the rock behind you ?
Come and wrestle with the others,
Let us pitch the quoit together !"

Lazy Kwasind made no answer,
To their challenge made no answer,
Only rose, and, slowly turning,
Seized the huge rock in his fingers,
Tore it from its deep foundation,
Poised it in the air a moment,
Pitched it sheer into the river,
Sheer into the swift Pauwating,
Where it still is seen in Summer.

Once as down that foaming river,
Down the rapids of Pauwating,
Kwasind sailed with his companions,
In the stream, he saw a beaver,
Saw Ahmeek, the King of Beavers,
Struggling with the rushing currents,
Rising, sinking in the water.

Without speaking, without pausing,
Kwasind leaped into the river,

Plunged beneath the bubbling surface,
 Through the whirlpools chased the beaver,
 Followed him among the islands,
 Stayed so long beneath the water,
 That his terrified companions
 Cried, "Alas! good bye to Kwasind!
 We shall never more see Kwasind!"
 But he reappeared triumphant,
 And upon his shining shoulders
 Brought the beaver, dead and dripping,
 Brought the King of all the Beavers.

And these two, as I have told you.
 Were the friends of Hiawatha,
 Chibiabos, the musician,
 And the very strong man, Kwasind.
 Long they lived in peace together,
 Spake with naked hearts together,
 Pondering much, and much contriving
 How the tribes of men might prosper.
 H. W. LONGFELLOW.

mu-si-cian (*myŭ-*)

false'-hood (*fōls-*)

mŭs-chief

con-triv-ing

wrèstle (*rèsl*)

plŭ-ant

en-vi-ous

way'-ward

mèl-an-cho-ly

for-bid-ding

chàl-lenge

whŭrl-pool

tri-ùmph-ant

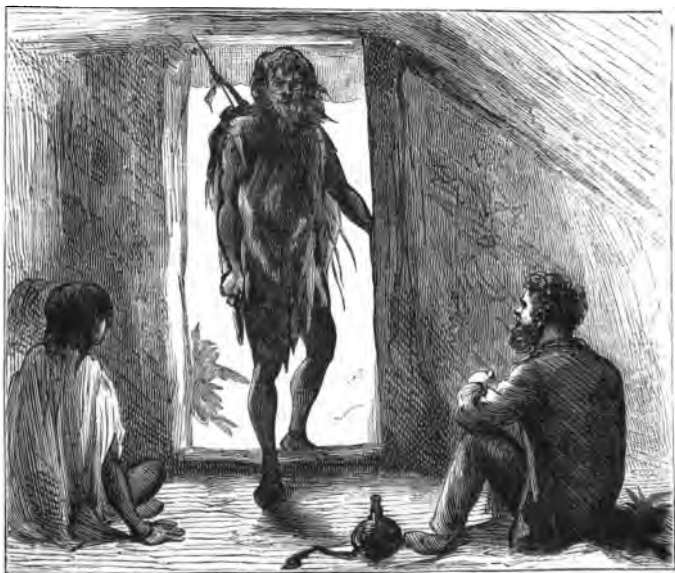
quoit (*koit*)

<i>clôs-est</i> , nearest. Lat. <i>clausum</i> , "to shut up."	mind, not far from madness ; wild excitement. French,
<i>un'-ion</i> (<i>yún-yun</i>), oneness. Lat. <i>unus</i> , "one."	<i>frénésie</i> , from Greek, <i>phrên</i> , "the brain, mind."
<i>pònd-er-ing</i> , weighing, thinking over carefully. Lat. <i>pondero</i> , "I weigh in my mind," <i>pon-</i> <i>du</i> (<i>ponderis</i>), "a weight."	<i>pá-thos</i> , tender feeling. Greek, <i>pathos</i> , "feeling."
<i>fàsh-ioned</i> , made, formed, shaped. French, <i>façon</i> , "the make, or form of a thing," from Lat. <i>facio</i> , "I make."	<i>al-lied</i> , bound to, united. French, <i>allier</i> , "to join, mix with," from Lat. <i>alligare</i> , from <i>ad</i> , "to," and <i>ligo</i> , "I bind."
<i>paus'-ing</i> , (<i>pôz-</i>), stopping.	<i>Màn-i-to</i> , spirit.
<i>frèn-zy</i> , violent agitation of the	<i>en-tréat</i> , beseech, ask ear- nestly.

A WILD MAN OF THE WOODS.

ABOUT an hour above the rock of Saba, in Demerara, stands the habitation of an Indian, called Simon, on the top of a hill. The side next the river is almost perpendicular, and you may easily throw a stone over to the opposite bank. Here there was an opportunity of seeing man in his rudest state. The Indians who frequented this habitation, though living in the midst of woods, bore evident marks of attention to their persons. Their hair was neatly collected, and tied up in a knot; their bodies fancifully painted red, and the paint was scented with hayawa. This gave them a gay and animated appearance. Some of them had on necklaces, composed of the teeth of wild boars slain in the chase; many

wore rings, and others had an ornament on the left arm, midway betwixt the shoulder and the elbow. At the close of day, they regularly bathed in the river below; and the next morning seemed busy in renewing the faded colours of their faces.



One day there came into the hut a form which literally might be called the wild man of the woods. On entering, he laid down a ball of wax, which he had collected in the forest. His hammock was all ragged and torn; and his bow, though of good wood, was without any ornament

or polish. His face was meagre, his looks forbidding, and his whole appearance neglected. His long black hair hung from his head in matted confusion; nor had his body, to all appearance, ever been painted. They gave him some cassava bread and boiled fish, which he ate voraciously, and soon after left the hut. As he went out, you could observe no traces in his countenance or demeanour, which indicated that he was in the least mindful of having been benefited by the society he was just leaving.

The Indians said he had neither wife, nor child, nor friend. They had often tried to persuade him to come and live amongst them; but all was of no avail. He went roving on, plundering the wild bees of their honey, and picking up the fallen nuts and fruits of the forest. When he fell in with game, he procured fire from two sticks, and cooked it on the spot. When a hut happened to be in his way, he stepped in, and asked for something to eat, and then months elapsed ere they saw him again. They did not know what had caused him to be thus unsettled; he had been so for years; nor did they believe that even old age itself would change the habits of this poor, harmless, solitary wanderer. WATERTON.

ôp-pos-ite
ôp-por-tun'-i-ty
fre-quênt-ed
col-lêct-ed
fàn-ci-fûll-ly
ân-im-ât-ed

ap-péar-ance
ôr-na-ment
re-new'-ing
lît-er-al-ly
neg-lêct-ed
un-sêt-tled

coun'-ten-ance
de-mean'-our
în-dic-ate
bên-e-fit-ed
per-suâde
wan'-der-er

hab-it-á-tion, dwelling. Lat. *habito*, "I inhabit, dwell," from *habitus*, "to have, or hold."

per-pend-ic-úl-ar, right up and down. Lat. from *perpendicularum*, "a plummet, plumb-line," from *per-pendo*, "I weigh thoroughly."

com-pósed, made up of. Lat. *com*, "together," and *positum*, "to place."

mea'-gre (*mé-ger*), lean, hungry-looking. French *maigre*, Lat. *macer*, "lean."

con-fú-sion, disorder, absence

of arrangement. Lat. *con*, "together," and *fusum*, "to pour."

vor-á-cious-ly, ravenously, very hungrily. Lat. *vorax*, "swallowing greedily," from *voro*, "I devour."

so-ci-e-ty, company. Lat. *societas*, "fellowship," from *socius*, "a companion."

e-lá-pse, glide away, pass. Lat. *e*, "out, away," and *labor*, *lapsus*, "to glide, slip."

sól-it-ar-y, lonely, living by oneself. Lat. *solitarius*, from *solus*, "alone."

THE NEW AND THE OLD SONG.

A NEW song should be sweetly sung,
It goes but to the ear;
A new song should be sweetly sung,
For it touches no one near:
But an old song may be roughly sung,
The ear forgets its art,
As comes upon the rudest tongue
The tribute to the heart.

A new song should be sweetly sung,
For memory gilds it not;
It brings not back the strains that rung
Through childhood's sunny cot.

But an old song may be roughly sung,
 It tells of days of glee,
 When the boy to his mother elung,
 Or danced on his father's knee.

On tented fields 'tis welcome still ;
 'Tis sweet in the stormy sea ;
 In forest wild, on rocky hill,
 And away on the prairie lea.
 But dearer far the old song,
 When friends we love are nigh,
 And well-known voices, clear and strong
 Unite in the chorus cry.

Of the old song, the old song,
 The song of the days of glee,
 When the boy to his mother clung,
 Or danced on his father's knee !
 Oh ! the old song—the old song !
 The song of the days of glee ;
 The new song may be better sung,
 But the good old song for me !

JOHN K. MITCHELL.

<i>sweet'-ly</i>	<i>mè-m-or-y</i>	<i>tongue (tùng)</i>
<i>rough'-ly (rùf-)</i>	<i>chó-rus (kó-)</i>	<i>knee (né)</i>
<i>dear'-er</i>	<i>un-íte (yũn-ít)</i>	<i>nigh (nì)</i>

prair'-ie (prár-i), vast grassy plain. French, *prairie*, "a large meadow," Ital. *prateria*,

"meadows," from Lat. *pratium*, "a meadow."

THE FLAX.

1. THE FIRST CHANGE.

THE flax was in full bloom ; it had pretty little blue flowers, delicate as the wings of a moth, or even more so. The sun shone and the showers watered it ; and this was just as good for the flax as it is for little children to be washed and then kissed by their mother. They look prettier for it, and so did the flax.

"People say that I look exceedingly well," said the flax, "and that I am so fine and long that I shall make a beautiful piece of linen. How fortunate I am ; it makes me so happy ; it is such a pleasant thing to know that something can be made of me. How the sunshine cheers me, and how sweet and refreshing is the rain ; my happiness overpowers me, no one in the world can feel happier than I am."

"Ah, yes, no doubt," said the fern ; "but you do not know the world yet as well as I do, for my sticks are knotty" ; and then it sung quite mournfully—

"Snip, snap, snurre,
Basse lurre :
The song is ended."

"No, it is not ended," said the flax. "To-morrow the sun will shine, or the rain will descend. I feel that I am growing. I feel that I am in full blossom. I am the happiest of all creatures."

Well; one day some people came, who took hold of the flax and pulled it up by the roots—this was painful,—then it was laid in water as if they intended to drown it, and after that it was placed near a fire as if it were to be roasted. All this was very shocking. “We cannot expect to be happy always,” said the flax; “by experiencing evil as well as good, we become wise.” And certainly there was plenty of evil in store for the flax. It was steeped, and roasted, and broken, and combed; indeed, it scarcely knew what was done to it. At last it was put on the spinning wheel. “Whirr, whirr,” went the wheel, so quickly that the flax could not collect its thoughts. “Well; I have been very happy,” he thought, in the midst of his pain, “and must be contented with the past.” And contented he remained till he was put on the loom, and became a beautiful piece of white linen. All the flax, even to the last stalk, was used in making this one piece. “Well, this is quite wonderful; I could not have believed that I should be so favoured by fortune. The fern really was not wrong with its song of

‘Snip, snap, snurre,
Basse lurre.’

But the song is not ended yet, I am sure; it is only just beginning. How wonderful it is that, after all I have suffered, I am made something of at last; I am the luckiest person in the world—so strong and fine; and how white; and what a length! This is something different to being a mere plant and bearing flowers.

Then, I had no attention, nor any water unless it rained; now, I am watched and taken care of. Every morning the maid turns me over, and I have a shower bath from the watering pot every evening. Yes, and the clergyman's wife noticed me, and said I was the best piece of linen in the whole parish. I cannot be happier than I am now."

ex-ceed'-ing-ly

re-fresh-ing

hàp-pi-ness

mourn'-fùl-ly

pain'-fùl

in-tend-ed

con-tènt-ed

clèr-gy-man

re-mained'

dè-lic-ate, delightful, charming, soft, tender. Lat. *delicatus*, from *de*, "down, away," and *lac*, "to draw gently, entice."

ex-pér-i-enc-ing, feeling, gaining knowledge of (by trial). Lat. *experior*, "I try."

2. THE SECOND CHANGE.

After some time the linen was taken into the house, placed under the scissors, and cut and torn into pieces, and then pricked with needles. This certainly was not pleasant; but at last it was made into twelve garments. "See! Now, then," said the flax; I have become something of importance. This was my destiny; it is quite a blessing. Now I shall be of some use in the world, as every one ought to be; it is the only way to be happy. I am now divided into twelve pieces, and yet we are all one and the same in the whole dozen. It is most extraordinary good fortune."

Years passed away; and at last the linen was so

worn it could scarcely hold together. "It must end very soon," said the pieces to each other; "we would gladly have held together a little longer, but it is useless to expect impossibilities." And at length they fell into rags and tatters, and thought it was all over with them, for they were torn to shreds, and steeped in water, and made into a pulp, and dried, and they knew not what besides, till all at once they found themselves beautiful white paper. "Well, now, this is a surprise; a glorious surprise, too!" said the paper. "I am now finer than ever, and I shall be written upon, and who can tell what fine things I may have written upon me. This is wonderful luck!" And sure enough the most beautiful stories and poetry were written upon it, and only once there was a blot, which was very fortunate. Then people heard the stories and poetry read, and it made them wiser and better; for all that was written had a good and sensible meaning, and a great blessing was contained in the words on this paper.

"I never imagined anything like this," said the paper, "when I was only a little blue flower, growing in the fields. How could I fancy that I should ever be the means of bringing knowledge and joy to men? I cannot understand it myself, and yet it is really so. Heaven knows that I have done nothing myself but what I was obliged to do with my weak powers for my own preservation; and yet I have been promoted from one joy and honour to another. Each time I think that the song is ended, and then something higher and better begins for me. I suppose now I shall be sent on my

travels about the world, so that people may read me. It cannot be otherwise ; indeed, it is more than probable ; for I have more splendid thoughts written upon me than I had pretty flowers in olden times. I am happier than ever."

But the paper did not go on its travels ; it was sent to the printer, and all the words written upon it were set up in type, to make a book ; or, rather, many hundreds of books ; for so many more persons could derive pleasure and profit from a printed book than from the written paper ; and if the paper had been sent about the world, it would have been worn out before it had got half through its journey.

"This is certainly the wisest plan," said the written paper ; "I really did not think of that. I shall remain at home, and be held in honour, like some old grandfather, as I really am to all these new books. They will do some good. I could not have wandered about as they do. Yet he who wrote all this has looked at me as every word flowed from his pen upon my surface. I am the most honoured of all."

gār-ment

sur-prîse

sens-i-ble

plea'-sant

glô-ri-ous

con-tained'

know-ledge

prôd-fit

jour'-ney

scis-sors, a common instrument for cutting. From Lat. *scis-sum*, "to cut, rend, split."

dè-stin-y, fate, appointed future, unavoidable lot. Lat. *desti-*

nare, "to appoint, ordain, fix firmly."

ex-tra-ôrd-in-ar-y, beyond what is ordinary, usual, common. Lat. *extra*, "on the outside"

of, beyond"; *ordinarius*, from *ordo* (*ordinis*), "order."
im-poss-i-bil-i-ties, things that cannot be done. Lat *im* (*in*), "not," and *possum*, "I am able."
im-à-gined, thought of.

pre-serv-à-tion, keeping safe. Lat. *præ*, "before," and *ser-vare*, "to save, deliver."
pro-mòt-ed, moved forward, advanced, raised to higher rank or honour. Lat. *pro*, "forward," and *motum*, "to move."

3. THE THIRD CHANGE.

Then the paper was tied in a bundle with other papers, and thrown into a tub that stood in the washhouse.

"After work, it is well to rest," said the paper, "and a very good opportunity to collect one's thoughts. Now I am able, for the first time, to think of my real condition; and to know one's self is true progress. What will be done with me now, I wonder? No doubt I shall still go forward. I have always progressed hitherto, as I know quite well."

Now it happened one day that all the paper in the tub was taken out, and laid on the hearth to be burnt. People said it could not be sold at the shop, to wrap up butter and sugar, because it had been written upon. The children in the house sat down before the fire; for they wanted to see the paper burn, because it flamed up so prettily, and afterwards, among the ashes, so many red sparks could be seen running one after the other, here and there, as quick as the wind. They called it seeing the children come out of school, and the last spark was the schoolmaster. They often thought the last spark

had come ; and one would cry, " There goes the school-master ; " but the next moment another spark would appear, shining so beautifully. How they would like to know where the sparks all went to ! Perhaps we shall find out some day, but we don't know now.



The whole bundle of paper had been placed on the fire, and was soon alight. " Ugh," cried the paper, as it burst into a bright flame ; " ugh." It was certainly not very pleasant to be burning ; but when the whole was wrapped in flames, the flames mounted up into the

air, higher than the flax had ever been able to raise its little blue flower, and they glistened as the white linen never could have glistened. All the written letters became quite red in a moment, and all the words and thoughts turned to fire.

"Now, I am mounting straight up to the sun," said a voice in the flames; and it was as if a thousand voices echoed the words; and the flames darted up through the chimney, and went out at the top. Then a number of tiny beings, as many in number as the flowers on the flax had been, and invisible to mortal eyes, floated above them. They were even lighter and more delicate than the flowers from which they were born; and as the flames were extinguished, and nothing remained of the paper but black ashes, these little beings danced upon it; and whenever they touched it, bright red sparks appeared.

"The children are all out of school, and the school-master was the last of all," said the children. It was good fun, and they sang over the dead ashes,—

"Snip, snap, snurre,
Basse lurre :
The song is ended."

But the little invisible beings said, "The song is never ended; the most beautiful is yet to come."

But the children could neither hear nor understand this, nor should they; for children must not know everything.

HANS CHRISTIAN ANDERSEN.

con-dì-tion
fòr-ward
mount'-ing

chìm-ney
è-cho (èk-o)
mòr-tal

straight (strát)
bright (brít)
school (skúl)

prò-gress, going forward, advancement. Lat. *progressus*, from *pro*, "forward," and *gradior, gressus*, "to walk, take steps."
in-vis-i-ble, that cannot be seen. Lat. *in*, "not," and *visum*, "to see."

pro-grèss, to make prògress, to advance.
glis-ten (glìen), to shine, sparkle with light.
ex-tin-guish, to put out (a light, or a fire). Lat. *ex*, "out," and *stinguo*, "I scratch out, quench."

THE OWL.

IN the hollow tree in the grey old tower,
 The spectral owl doth dwell;
 Dull, hated, despised in the sunshine hour,
 But at dusk,—he's abroad and well:
 Not a bird of the forest e'er mates with him;
 All mock him outright by day;
 But at night, when the woods grow still and dim,
 The boldest will shrink away;
 O, when the night falls, and roosts the fowl,
 Then, then is the reign of the horned owl!

And the owl hath a bride who is fond and bold,
 And loveth the wood's deep gloom;
 And with eyes like the shine of the moonshine cold
 She awaiteth her ghastly groom!

Not a feather she moves, not a carol she sings,
As she waits in her tree so still ;
But when her heart heareth his flapping wings,
She hoots out her welcome shrill !
O, when the moon shines, and the dogs do howl,
Then, then is the cry of the horned owl !



Mourn not for the owl nor his gloomy plight !
The owl hath his share of good :
If a prisoner he be in the broad daylight,
He is lord in the dark green wood !

Nor lonely the bird, nor his ghastly mate ;
 They are each unto each a pride—
 Thrice fonder, perhaps, since a strange dark fate
 Hath rent them from all beside !
 So when the night falls, and dogs do howl,
 Sing Ho ! for the reign of the horned owl !
 We know not alway who are kings by day,
 But the king of the night is the bold brown owl.
 BARRY CORNWALL.

<i>hát-ed</i>	<i>out-ríght</i>	<i>reign (rán)</i>
<i>de-spísed</i>	<i>prís-on-er</i>	<i>a-wait'-eth</i>

<i>spéc-tral</i> , like a spectre, or ghost.	pale ; foreboding death.
<i>ghást-ly</i> , like a ghost, deathlike,	<i>càr-ol</i> , song of joy.
	<i>plíght (plít)</i> , condition, state.

HOW THE ENGLISH CONQUERED BRITAIN.

THE land in which we live is called England, that is to say, the land of the English. But it was not always called England, because there were not always Englishmen living in it. The old name of the land was Britain. And we still call the whole island in which we live Great Britain, of which England is the southern part and Scotland the northern. We call it *Great Britain*, because there is another land also called Britain, namely, the north-western corner of Gaul ; but this last we now

generally call *Britanny*. The two names, however, are really the same, and both are called in Latin *Britannia*.

In the old days, then, when the land was called only Britain, Englishmen had not yet begun to live in it. Our forefathers then lived in other lands, and had not yet come into the land where we now live; but there was an England even then, namely the land in which Englishmen then lived. If you look at a map of Denmark or of Northern Germany, you will see on the Baltic Sea a little land called *Angeln*; that is the same name as *England*. I do not mean that all our forefathers came out of that one little land of Angeln; but they all came from that part of the world, from the lands near the mouth of the Elbe, and that one little land has kept the English name to this day.

It is a long time, fourteen hundred years and more, since our forefathers began to come from their old land by the mouth of the Elbe and to live in the Isle of Britain. And when they came here, they did not come into a land where no men were dwelling, so that they could sit down and live in it without any trouble. They found a land in which men were already living, and they had to fight against the men whom they found in the land, and to take their land from them. The men whom our forefathers found in the Isle of Britain were not men of their own nation or their own speech. They were the men who had lived in the land for many ages, and they were called by the same name as the land itself, for they were called the Britons. But our forefathers called them by another name, for they spoke a tongue which our

forefathers did not understand, and in Old-English those who spoke a tongue which could not be understood were called *Welsh*. So our forefathers called the men whom they found in the land the Welsh. And the children of those men, the children of the men who lived in the



Isle of Britain before our forefathers came into it, we call the Welsh to this day.

Of our own people, before they came into Britain, we hear very little indeed. The first mention of the English people is in the great Roman historian Tacitus, and he simply mentions the name among a string of other German tribes. And other notices in the Greek

and Roman writers are few indeed. It is only towards the end of the fourth century, when our forefathers began to attack the coasts of Britain, that we first begin to hear something for certain about them. The Roman power in Britain was now getting weaker; the Romans had much ado to keep their province safe from the Picts and Scots in the north of the island, and the coasts now began to be ravaged by the fleets of the Saxons.

By about A.D. 410 everything in Italy was in confusion, and Rome itself was sacked by the Goths. Then the Emperor Honorius recalled the Roman legions from Britain, and left the people of the land to shift for themselves. It was now much more easy for the Angles and Saxons to come into Britain. They could now come, not merely to plunder and go away, but to settle and live in the land. Sometimes, it is said, the Britons were foolish enough to ask the Angles and Saxons to help them against the Picts and Scots who kept pouring in from the north. I need not tell you that, when our fathers were once asked to come into the land, they took care to stay there. However this may be, it is certain that, in the course of something more than a hundred years, in the course of the fifth and sixth centuries, the Teutons from beyond the sea conquered much the greater part of Britain. At the end of the sixth century the Picts and Scots remained north of the Forth, and the Welsh in the west of the island, that is, not only in what is now Wales, but in all the land west of the Severn, and again in Cumberland and the neighbouring parts, and in Cornwall, Devonshire, and part of Somerset.

But all the rest of the land was in the hands of our own forefathers.

At first the Angles and Saxons seem to have destroyed all the towns which they took ; but some of the great cities they seem not to have taken for a good while, till our fathers had become somewhat more civilized. And, instead of either mixing with the people, or else leaving them their own laws and part of their lands, they always either killed or made slaves of all the people that they could. Those who could get away no doubt escaped into Wales and Cornwall and the other parts of the island which the Angles and Saxons had not yet reached. Of the others you may suppose that those who fought against our forefathers were killed, and those who submitted were made slaves. And there is every reason to believe that our forefathers often brought over women of their own people with them ; so that we had English mothers as well as English fathers. Still we cannot suppose that the Welsh women were so completely killed or driven out as the men ; some would be made slaves, and some might even be married to their masters. Thus there may doubtless be some little British and Roman blood in us, just as some few Welsh and Latin words crept into the English tongue from the very beginning. But we may be sure that we have not much of their blood in us, because we have so few of their words in our language. The few that there are, are mainly the sort of words which the women, whether wives or slaves, would bring in, that is, names of things in household use, such as *basket*, which is one of the few

Welsh words in English. Thus you see that our forefathers really became the people of the land in all that part of Britain which they conquered. For they had killed or driven out all the former people, save those whom they kept as mere slaves. Thus they kept their own language, their own manners, and their own religion.

Now you will perhaps say that our forefathers were cruel and wicked men thus to come into the land of another people, and to take the land to themselves and to kill or make slaves of the men to whom it belonged. And so doubtless it was. But you must remember that we were then both a heathen and a barbarous people, and that it is not fair to judge our fathers by the same rules as if they had been either Christians or civilized men. And I am afraid that men who called themselves both Christian and civilized have, even in quite late times, treated the people of distant lands quite as badly as ever our forefathers treated the Welsh. But anyhow it has turned out much better in the end that our forefathers did thus kill or drive out nearly all the people whom they found in the land. The English were thus able to grow up as a nation in Britain, and their laws, manners, and language grew up with them, and were not copied from those of other nations.

We may be sure that a great many different Teutonic tribes had a share in this great movement across the seas. But they seem to have all been nearly akin to each other, and to have spoken much the same language. Three tribes especially are spoken of above all others,

the Angles, the Saxons, and the Jutes; and of these it was that the land was mainly overspread. Of these three, the Saxons are those of whom we hear first; and this is no doubt the reason why the Celtic people in Scotland, Wales, and Ireland call all Englishmen *Saxons* to this day. But the Angles took a greater part of the land than any of the others, so that it was they who, in the end, gave their name to the land and its people. As the Teutons in Britain began to grow together into one people, they were sometimes called the *Anglo-Saxons*—that is, the people made up of the Angles and Saxons—but more commonly they were called *Angles* or *English* alone. And when so much of Britain as the Teutons lived in came to have a common name, that name was ENGLALAND or ENGLAND, that is, the land of the Angles or ENGLISH. *Saxon* by itself always meant the people of those parts only where the Saxons settled, and the whole people was never called so except by the Celts.

Thus it was that our fathers came into the land where we now dwell; and, like the men whom we read of in old times, they called the land after their own name.

E. A. FREEMAN.

fôre-fâth-er-s

his-to'-ri-an

mèn-tions

nô-tice

prò-vince

râv-age

con-fu'-sion

em-per-or

sub-mît-ted

com-pléte-ly

de-stroy

crû-el

civ-il-ized

bâr-bar-ous

re-lî-gion

be-lônged

doubt' less

heath-en



DOWN ON THE SHORE.

Down on the shore, on the sunny shore !
Where the salt smell cheers the land ;
Where the tide moves bright under boundless light,
And the surge on the glittering strand ;
Where the children wade in the shallow pools,
Or run from the froth in play ;
Where the swift little boats with milk-white wings
Are crossing the sapphire bay,
And the ship in full sail, with a fortunate gale,
Holds proudly on her way ;
Where the nets are spread on the grass to dry,
And asleep, hard by, the fishermen lie,

Under the tent of the warm blue sky,
With the hushing wave on its golden floor
To sing their lullaby.

Down on the shore, on the stormy shore !
Beset by a growling sea,
Whose mad waves leap on the rocky steep
Like wolves up a traveller's tree ;
Where the foam flies wide, and an angry blast
Blows the curlew off, with a screech ;
Where the brown sea-wrack, torn up by the roots,
Is flung out of fishes' reach ;
Where the tall ship rolls on the hidden shoals,
And scatters her planks on the beach ;
Where slate and straw through the village spin,
And a cottage fronts the fiercest din,
With a sailor's wife sitting sad within,
Hearkening the wind and the water's roar,
Till at last her tears begin. W. ALLINGHAM.

glit-ter-ing

for-tu-nate

fish-er-man

trà-vel-ler

heärk-en-ing

growl'-ing

bound'-less

gold-en

cür-lew

surge, large waves, great swelling masses of water. Lat. *surgere*, "to rise."

the sapphire bay (*säf-für*), the bay, which appears like sapphire—a precious stone, inferior to the diamond in

brilliancy, and of various shades of blue.

lull-a-by, song to quiet or soothe one to sleep.

be-set, set or pressed upon, closely hemmed in.

wrack (*räk*), sea-plant, seaweed.

CRUSOE AND HIS BOAT.

MY desire to venture over for the main increased rather than decreased, as the means for it seemed impossible. This at length put me upon thinking whether it was not possible to make myself a canoe, such as the natives of those climates make, even without tools, or, as I might say, without hands, of the trunk of a great tree. This I not only thought possible, but easy, and pleased myself extremely with the thoughts of making it, and with my having much more convenience for it than any of the Negroes or Indians; but not at all considering the particular inconveniences which I lay under more than the Indians did, namely, want of hands to move it, when it was made, into the water—a difficulty much harder for me to surmount than all the consequences of want of tools could be to them; for what was it to me, if, when I had chosen a vast tree in the woods, and with much trouble cut it down, if I had been able with my tools to hew and dub the outside into the proper shape of a boat, and burn or cut out the inside to make it hollow, so as to make a boat of it—if, after all this, I must leave it just there where I found it, and not be able to launch it into the water?

One would have thought I could not have had the least reflection upon my mind of my circumstances while I was making this boat, but I should have immediately thought how I should get it into the sea; but my thoughts

were so intent upon my voyage over the sea in it, that I never once considered how I should get it off the land : and it was really, in its own nature, more easy for me to guide it over forty-five miles in sea, than about forty-five fathoms of land, where it lay, to set it afloat in the water.

I went to work upon this boat the most like a fool that ever man did who had any of his senses awaké. I pleased myself with the design, without determining whether I was ever able to undertake it ; not but that the difficulty of launching my boat came often into my head ; but I put a stop to my inquiries into it, by this foolish answer, which I gave myself : “ Let me first make it ; I warrant I will find some way or other to get it along when it is done.”

This was a most preposterous method ; but the eagerness of my fancy prevailed, and to work I went. I felled a cedar-tree, and I question much whether Solomon ever had such a one for the building the Temple of Jerusalem ; it was five feet ten inches diameter at the lower part next the stump, and four feet eleven inches diameter at the end of twenty-two feet ; after which it lessened for a while, and then parted into branches. It was not without infinite labour that I felled this tree ; I was twenty days hacking and hewing at it at the bottom ; I was fourteen more getting the branches and limbs and the vast spreading head cut off, which I hacked and hewed through with axe and hatchet, and inexpressible labour : after this, it cost me a month to shape it and dub it to a proportion, and to something like the bottom of

a boat, that it might swim upright as it ought to do. It cost me near three months more to clear the inside, and work it out so as to make an exact boat of it ; this I did, indeed, without fire, by mere mallet and chisel and by the dint of hard labour, till I had brought it to be a very handsome canoe and big enough to have carried six-and-twenty men, and consequently big enough to have carried me and all my cargo.

When I had gone through the work, I was extremely delighted with it. The boat was really much bigger than ever I saw a canoe that was made of one tree, in my life. Many a weary stroke it had cost, you may be sure ; and had I gotten it into the water, I make no question but I should have begun the maddest voyage, and the most unlikely to be performed, that ever was undertaken.

But all my devices to get it into the water failed me ; though they cost me infinite labour too. It lay about one hundred yards from the water, and not more ; but the first inconvenience was, it was up hill towards the creek. Well, to take away this discouragement, I resolved to dig into the surface of the earth, and so make a declivity : this I began, and it cost me a prodigious deal of pains (but who grudge pains who have their deliverance in view ?) ; but when this was worked through, and this difficulty managed, it was still much the same, for I could not stir the canoe. Then I measured the distance of ground, and resolved to cut a dock or canal, to bring the water up to the canoe, seeing I could not bring the canoe down to the water Well,

I began this work ; and when I began to enter upon it, and calculate how deep it was to be dug, how broad, how the stuff was to be thrown out, I found that, by the number of hands I had, being none but my own, it must have been ten or twelve years before I could have gone through with it ; for the shore lay so high, that at the upper end it must have been at least twenty feet deep ; so at length, though with great reluctancy, I gave this attempt over also.

This grieved me heartily ; and now I saw, though too late, the folly of beginning a work before we count the cost, and before we judge rightly of our own strength to go through with it.

DEFOE.

<i>in-creased</i> }	<i>con-vén-i-ence</i> }	<i>pòss-i-ble</i>
<i>dé-creased</i> }	<i>in-con-vén-i-ence</i> }	<i>im-poss-i-ble</i>
<i>par-tic-ùl-ar</i>	<i>éa-ger-ness</i>	<i>clt-mate</i>
<i>còn-sè-quen-cés</i>	<i>pro-dì-gious</i>	<i>dě-sìgn</i>
<i>cìr-cum-stan-cés</i>	<i>de-liv-er-ance</i>	<i>at-tèmp-t</i>
<i>im-mé-di-ate-ly</i>	<i>mèas-ured</i>	<i>grièved</i>

the main, the main-land.
to make myself a canoe. Ex-
 press fully.

nè-groes, black people. Spanish,
negro, from Lat. *niger*,
 "black." What is the
 feminine word = "a female
 negro" ?

sur-mount, to mount or rise
 above, to overcome. French
surmonter, from *sur* (Lat.
super), "above," and *monter*

(Lat. *mont-*, "a hill"), "to
 rise."

re-flec-tion, thinking, thought.
 Lat. *re*, "back," and *flectum*,
 "to bend, or turn"; the
 turning of the mind back
 upon a thing.

in-quir-ies, askings, question-
 ings. Lat. *in-quirere*, "to
 seek after, or search into";
 from *in*, "into," and *quæro*,
 "I seek, or ask."

pre-post-er-ous, having before, or in front, what ought properly to come last; like "putting the cart before the horse"; hence, absurd. Lat. *præposterus*, from *præ*, "before," and *posterus*, "later, coming after."

præ-vailed, got the better (of my judgment); proved stronger (than my reason). Lat. *præ*, "before," and *valere*, "to be strong."

the building the Temple. This might also have been either "building the Temple," or "the building of the Temple." Parse "building" very carefully in each case.

diameter. In the minute analysis, or parsing, how would you deal with this word here?

hacking . . . hewing . . . getting. In full, "on, or in (or a),

hacking, &c." Compare: "Forty and six years was this temple in building." "He set the clock going, or a-going."

in-ex-press-i-ble, unutterable, harder than can be expressed or stated; very great. Elsewhere in this lesson, the meaning is otherwise expressed.

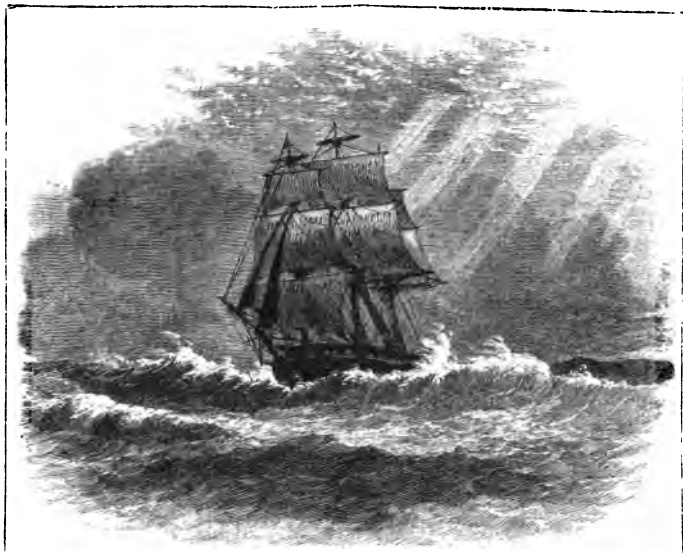
dis-cour-age-ment, cause of being discouraged, or losing heart. Lat. *dis*, "asunder," French, *courage*, from French, *cœur*, Lat. *cor*, "heart."

de-cliv-i-ty, slope, gradual descent. Lat. *de*, "down," and *clivus*, "a slope."

câl-cûl-ate, reckon up, count. Lat. *calculus*, "a pebble."

re-luct-an-cy, reluctance, unwillingness. Lat. *re*, "back," and *luctans*, "struggling."

EXERCISE.—Vary, in several different ways, the expression of the sentence: "It was not without infinite labour that I felled this tree." Other sentences in this lesson suggest help to you. If any other form seems to you better than this, give your reasons for thinking so.



THE DEEP.

THERE's beauty in the deep :
The wave is bluer than the sky,
And, though the lights shine bright on high,
More softly do the sea-gems glow
That sparkle in the depths below ;
The rainbow's tints are only made
When on the waters they are laid ;
The sun and moon most sweetly shine
Upon the ocean's level brine.
There's beauty in the deep.

There's music in the deep :

It is not in the surf's rough roar,
Nor in the whispering shelly shore,—
They are but earthly sounds that tell
How little of the sea-nymph's shell,
That sends its loud clear note abroad,
Or winds its softness through the flood,
Echoes through groves, with coral gay,
And dies, on spongy banks, away.

There's music in the deep.

There's quiet in the deep:—

Above, let tides and tempests rave,
And earthborn whirlwinds wake the wave ;
Above, let care and fear contend
With sin and sorrow, to the end :
Here, far beneath the tainted foam
That frets above our peaceful home,
We dream in joy, and wake in love,
Nor know the rage that yells above.

There's quiet in the deep.

J. G. C. BRAINARD.

beau'-ty
mu'-sic
qui-et

whls-per-ing
earth'-born
sea'-nymphs

e-choes
whirl-wind
têm-pests

THE EAGLE'S NEST.

1. THE PROMISE.

WHO was the best marksman in the Canton Valais? The chamois knew well. "Save yourselves from Rudy," they might well say. And who is the handsomest marksman? "Oh, it is Rudy," said the maidens. He was so brave and cheerful. His cheeks were brown, his teeth white, and his eyes dark and sparkling. He was now a handsome young man of twenty years. The most icy water could not deter him from swimming; he could twist and turn like a fish. None could climb like him, and he clung as firmly to the edge of the rocks as a limpet. He had strong muscular power, as could be seen when he leapt from rock to rock. He had learnt his lesson from the cat, and more lately from the chamois. Rudy was considered the best guide over the mountains; every one had great confidence in him. He might have made a great deal of money as guide. His uncle had also taught him the trade of a cooper; but he had no inclination for either, his delight was in chamois-hunting, which also brought him plenty of money. Rudy would be a very good match, as people said, if he would not look above his own station. . . .

Down in the Valley, near Bex, among the great walnut-trees, by the side of a little rushing mountain-stream, lived a rich miller. His dwelling-house was a

large building three storeys high, with little turrets. The roof was covered with chips, bound together with tin plates that glittered in sunshine and in the moonlight. The largest of the turrets had a weathercock, representing an apple pierced by a glittering arrow, in memory of William Tell. The mill was a neat and well ordered place, that allowed itself to be sketched and written about ; but the miller's daughter did not permit any to sketch or write about her. So at least Rudy would have said, for her image was pictured in his heart ; her eyes shone in it so brightly, that quite a flame had been kindled there ; and like all other fires, it had burst forth so suddenly, that the miller's daughter, the beautiful Babette, was quite unaware of it. Rudy had never spoken a word to her on the subject. The miller was rich, and, on that account, Babette stood very high, and was rather difficult to aspire to. But, said Rudy to himself, " Nothing is too high for a man to reach ; he must climb with confidence in himself, and he will not fail." He had learnt this lesson in his youthful home.

Rudy set out to go to Bex ; and when he arrived there, he found the miller and his daughter at home. They received him kindly. Babette did not say much. She seemed to have become quite silent ; but her eyes spoke, and that was quite enough for Rudy. The miller had generally a great deal to talk about, and seemed to expect that every one would listen to his jokes, and laugh at them ; for was not he the rich miller ? But now he was more inclined to hear Rudy's adventures

while hunting and travelling, and to listen to his descriptions of the difficulties the chamois-hunter has to overcome on the mountain-tops, or of the dangerous snow drifts which the wind and weather cause to cling to the edges of the rocks, or to lie in the form of a frail bridge over the abyss beneath. The eyes of the brave Rudy sparkled as he described the life of a hunter, or spoke of the cunning of the chamois and their wonderful leaps; also of the rolling avalanche. He noticed that, the more he described, the more interested the miller became, especially when he spoke of the fierce vulture and of the royal eagle. Not far from Bex, in the Canton Valais, was an eagle's nest, most curiously built under a high, overhanging rock. In this nest was a young eagle; but who would venture to take it? A young Englishman had offered Rudy a whole handful of gold, if he would bring him the young eagle alive.

"There is a limit to everything," was Rudy's reply. "The eagle could not be taken, it would be folly to attempt it."

Not many days after this visit, Rudy was riding in the omnibus that runs between the cantons Vaud and Valais. These cantons are separated by the Rhone, over which is a bridge that unites them. Rudy, as usual, had plenty of courage, and indulged in pleasant thoughts of the favourable answer he should receive that evening.

"But she is so far above you," said the miller;

"Babette has heaps of gold, as you know. You should not attempt to reach her."

"There is nothing so high that a man cannot reach, if he will," answered Rudy; for he was a brave youth.

"Yet you could not reach the young eagle," said the miller laughing. "Babette is higher than the eagle's nest."

"I will have them both," said Rudy.

"Very well; I will give her to you when you bring me the young eaglet alive," said the miller; and he laughed till the tears stood in his eyes.

mùs-cûl-ar

wèath-er-cock

re-prê-sent-ing

stâ-tion

ùn-a-ware

ad-vèn-tures

de-scrip-tions

buîld-ing

òm-ni-bus

in-dûlged

pièrce'd

daugh'-ter

cân-ton, district; division of a country. The usual name for the provinces or counties of Switzerland.

châ-mois (*shâm-wö*), a kind of antelope or goat.

dè-tèr, hinder or prevent by fear, frighten from doing. Lat. *de*, "down, away from," and *terreo*, "I frighten."

côn-fid-ence, faith, trust. Lat. *con*, "together," and *fido*, "I trust."

in-clin-â-tion, leaning, tendency towards, desire. Lat. *in*, "into, towards," and *clino*,

"I bend."

a-spire, aim at something high or difficult to reach, desire eagerly. Lat. *ad*, "to, towards," and *spiro*, "I breathe."

a-byss (*a-bis*), a bottomless pit; a very deep place, pit, or mass of waters. Greek, *abyssos*, from *a*, "without," and *byssos*, "bottom."

à-val-anche, a mass of snow sliding down a mountain side. French, from *aval*, "to descend," from *aval*, "downwards," from Lat. *ad*, "to," and *vallem*, "a valley."

2. THE ACHIEVEMENT.

From the mountain-path came a joyous sound of some person whistling, and it betokened good humour and undaunted courage. It was Rudy going to meet his friend Vesinaud. "You must come and help me," said he, "I want to carry off the young eaglet from the top of the rock. We will take young Ragli with us."

"Had you not better first try to take down the moon? That would be quite as easy a task," said Vesinaud. "You seem to be in good spirits."

"Yes, indeed I am. I am thinking of my wedding. But to be serious, I will tell you all about it, and how I am situated."

Then he explained to Vesinaud and Ragli what he wished to do, and why.

"You are a daring fellow," said they; "but it is of no use; you will break your neck."

"No one falls, unless he is afraid," said Rudy.

So at midnight they set out, carrying with them poles, ladders, and ropes. The road lay amidst brushwood and underwood, over rolling stones, always upwards higher and higher in the dark night. Waters roared beneath them, or fell in cascades from above. Humid clouds were driving through the air as the hunters reached the precipitous ledge of the rock. It was even darker here, for the sides of the rock almost met, and the light penetrated only through a small opening at the top. At a little distance from the edge could be heard the sound of the roaring foaming waters in the yawning

abyss beneath them. The three seated themselves on a stone, to await in stillness the dawn of day, when the parent eagle would fly out, as it would be necessary to shoot the old bird before they could think of gaining possession of the young one. Rudy sat motionless, as if he had been part of the stone on which he sat. He held his gun ready to fire, on the highest point of the cliff, where the eagle's nest lay concealed beneath the overhanging rock.

The three hunters had a long time to wait. At last they heard a rustling, whirring sound above them, and a large hovering object darkened the air. Two guns were ready to aim at the dark body of the eagle as it rose from the nest. Then a shot was fired; for an instant the bird fluttered its wide-spreading wings, and seemed as if it would fill up the whole of the chasm, and drag down the hunters in its fall. But it was not so; the eagle sunk gradually into the abyss beneath, and the branches of trees and bushes were broken by its weight. Then the hunters roused themselves; three of the longest ladders were brought and bound together; the topmost rung of these ladders would just reach the edge of the rock which hung over the abyss, but no farther. The point beneath which the eagle's nest lay sheltered was much higher and the sides of the rock were as smooth as a wall. After consulting together, they determined to bind together two more ladders, and to hoist them over the cavity, and so form a communication with the three beneath them, by binding the upper ones to the lower. With great difficulty they contrived to drag the two

ladders over the rock, and there they hung for some moments, swaying over the abyss; but no sooner had they fastened them together, than Rudy placed his foot on the lowest step.

It was a bitterly cold morning; clouds of mist were rising from beneath, and Rudy stood on the lower step of the ladder as a fly rests on a piece of swinging straw which a bird may have dropped from the edge of the nest it was building on some tall factory chimney; but the fly could fly away, if the straw were shaken, Rudy could only break his neck. The wind whistled around him, and beneath him the waters of the abyss, swelled by the waters of the glaciers, those palaces of the Ice Maiden, foamed and roared in their rapid course. When Rudy began to ascend, the ladder trembled like the web of a spider, when it draws out the long delicate threads; but as soon as he reached the fourth of the ladders, which had been bound together, he felt more confidence,—he knew that they had been fastened securely by skilful hands. The fifth ladder, which appeared to reach the nest, was supported by the sides of the rock, yet it swung to and fro, and flapped about like a slender reed, and as if it had been bound by fishing lines. It seemed a most dangerous undertaking to ascend it, but Rudy knew how to climb; he had learnt that from the cat, and he had no fear. He did not observe Vertigo, who stood in the air behind him, trying to lay hold of him with his outstretched polypus arms.

When at length he stood on the topmost step of the ladder, he found that he was still some distance below

the nest, and not even able to see into it. Only by using his hands and climbing could he possibly reach it. He tried the strength of the stunted trees, and the thick underwood upon which the nest rested, and of which it



was formed, and finding they would support his weight, he grasped them firmly, and swung himself up from the ladders till his head and breast were above the nest, and then what an overpowering stench came from it; for in

it lay the putrid remains of lambs, chamois, and birds. Vertigo, although he could not reach him, blew the poisonous vapour in his face to make him giddy and faint; and beneath in the dark yawning deep, on the rushing waters, sat the Ice Maiden, with her long, pale, green hair falling around her, and her death-like eyes fixed upon him, like the two barrels of a gun. "I have thee now," she cried.

In a corner of the eagle's nest sat the young eagle, a large and powerful bird, though still unable to fly. Rudy fixed his eyes upon it, held on by one hand with all his strength, and with the other threw a noose round the young eagle. The string slipped to its legs, Rudy tightened it and thus secured the bird alive. Then flinging the sling over his shoulder, so that the creature hung a good way down behind him, he prepared to descend with the help of a rope, and his foot soon touched safely the highest step of the ladder. Then Rudy, remembering his early lesson in climbing, "Hold fast, and do not fear," descended carefully down the ladders, and at last stood safely on the ground with the young living eaglet, where he was received with loud shouts of joy and congratulations.

HANS CHRISTIAN ANDERSEN.

ex-plained

pre-cip-it-ous

pèn-e-trate

yaw'n-ing (yōn-)

con-cealed

con-sult-ing

con-trived

chīm-ney

com-mun'-i-cā-tion

out-strèched

poi'-son-ous

con-grat-ũ-lā-tions

a-chiève-ment, accomplishment, performance; successful result of great exertions. French, *achever*, "to bring to a head, to complete, finish"; from *à chef*, Lat. *ad caput*, "to a head."

be-tôk-en, give token, sign, or indication of.

un-daunt-ed, intrépide, fearless.

French, *dompter*, Lat. *domare*, "to tame."

cas-câde, waterfall.

hu'-mid, damp, moist.

pu'-trid, rotten, decayed.

câv-i-ty, a hollow. Lat. *cavus*, "hollow."

glâ-ci-ers, fields or huge masses of snow and ice in the valleys of snow-clad mountains. French, *glacière*, from Lat. *glacies*, "ice."

Ver-ti-go, dizziness (personified). Latin, from *verto*, "I turn."

pôl-y-pus, a radiated or star-like water animal, with *many feet* or arms round the mouth. Greek, *polypous*, from *polys*, "many," and *pous*, "foot."

EXERCISE.—Vary in several ways the sentence: "Only by using his hands and climbing could he possibly reach the nest."

A WISH.

MINE be a cot beside the hill ;

A bee-hive's hum shall soothe my ear ;

A willowy brook that turns a mill,

With many a fall, shall linger near.

The swallow oft, beneath my thatch,

Shall twitter from her clay-built nest ;

Oft shall the pilgrim lift the latch,

And share my meal, a welcome guest.

Around my ivied porch shall spring
 Each fragrant flower that drinks the dew,
 And Lucy, at her wheel, shall sing
 In russet gown and apron blue.



The village church among the trees,
 Where first our marriage vows were given,
 With merry peals shall swell the breeze,
 And point with lifted spire to heaven.

ROGERS.

wil-low-y
i-ved

pil-grim
wel-come

frag-rant
mar-riage

HOW SOIL IS MADE.

TAKE up a handful of soil from any field or garden, and look at it attentively. What is it made of? You see little pieces of crumbling stone, particles of sand and clay, perhaps a few vegetable fibres; and the whole soil has a dark colour from the decayed remains of plants and animals diffused through it. Now let us in the present Lesson try to learn how these different materials have been brought together.

The crumbling away of hard stone with the lapse of time is a common familiar fact. When a stone building has stood for a few hundred years, the smoothly dressed face which its walls received from the mason is usually gone. The stones are worn into holes and furrows, the carvings over window and doorway are so wasted that perhaps you cannot make out what they were meant to represent. This time-eaten character of old masonry is so familiar that one always looks for it in an old building, and when it is absent he at once doubts whether the building can really be old. Again, in the burying-ground surrounding a venerable church you see the tombstones more and more mouldered the older they are. Sometimes, especially in towns, the inscriptions dated for more than a few generations back are so greatly wasted that you cannot now tell whose names and virtues they were set up to commemorate. But the decay is not confined to human erections. On the contrary, it goes

on over the whole face of the world. Examine all the old buildings and pieces of sculpture within your reach. Look at the cliffs and ravines, the crags and watercourses, in your neighbourhood. At the base of each cliff you will probably find the ground cumbered with blocks and heaps of lesser fragments which have fallen from the rocks above, and after a frosty winter you may even find the fresh scar whence a new mass has been detached to add to the pile of ruins below. In spite of their apparent steadfastness, even the hardest stones are really crumbling down. In short, wherever rocks are exposed to the air they are liable to decay.

Every drop of rain which falls upon the land helps to alter the surface. It is by the constant operation of the *chemical* action of rain, drop after drop, and shower after shower, for years together, that the rocks become so wasted and worn.

In the first place, a little *carbonic acid* is abstracted from the air by the rain water, and when this sinks under the earth, it is enabled by means of the acid to eat away some parts of the rocks beneath. The same action takes place with the rain, which rests upon or flows over the surface of the ground. The rain water dissolves out little by little such portions of the rocks as it can remove. In the case of some rocks, such as limestone, the whole, or almost the whole, of the substance of the rock is carried away in solution. In other kinds, the portion dissolved is the cementing material whereby the mass of the rock was bound together : so that, when it is taken away, the rock crumbles into mere earth or sand.

which is readily washed away by the rain. Hence one of the causes of the mouldering of stone is the action of the carbonic acid taken up by rain.

In the second place, the *oxygen* of the portion of air contained in rain water helps to decompose rocks. When a piece of iron has been exposed for a time to the weather, in such a damp climate as that of Britain, it rusts. You know how, in the course of years, iron railings get quite eaten through, and how you can scrape the dirty yellow crust or powder from the corroded surfaces. This rust is a compound substance, formed by the union of oxygen with iron. It continues to be formed as long as any of the unruled iron remains, since as each crust of rust is washed off a new layer of iron is laid open to the attacks of the oxygen. What happens to an iron railing or a steel knife, happens also, though not so quickly, nor so strongly, to many rocks. They, too, rust by absorbing oxygen. A crust of corroded rock forms on their surface, and, when it is knocked off by the rain, a fresh layer of rock is reached by the ever-present and active oxygen.

In the third place, the surface of many parts of the world is made to crumble down by means of *frost*. You are, no doubt, acquainted with some of the effects of frost. You have, probably, noticed that sometimes during winter, when the cold gets very keen, pipes full of water burst, and jugs filled with water are cracked from top to bottom. The reason of this lies in the fact that water expands in freezing. Ice requires more space than the water would do if it remained fluid. When

ice forms within a confined space, it exerts a great pressure on the sides of the vessel, or cavity, which contains it. If these sides are not strong enough to bear the strain to which they are put, they must yield, and therefore they crack.

You have now learnt how easily rain finds its way through soil. Even the hardest rocks are more or less porous, and take in some water. Hence, when winter comes, the ground is full of moisture; not in the soil merely, but in the rocks. And so, as frost sets in, this pervading moisture freezes. Now, precisely the same kind of action takes place with each particle of water, as in the case of the burst water-pipe or the cracked jar. It does not matter whether the water is collected into some hole or crevice, or is diffused between the grains of the rocks and the soil. When it freezes it expands, and in so doing tries to push asunder the walls between which it is confined.

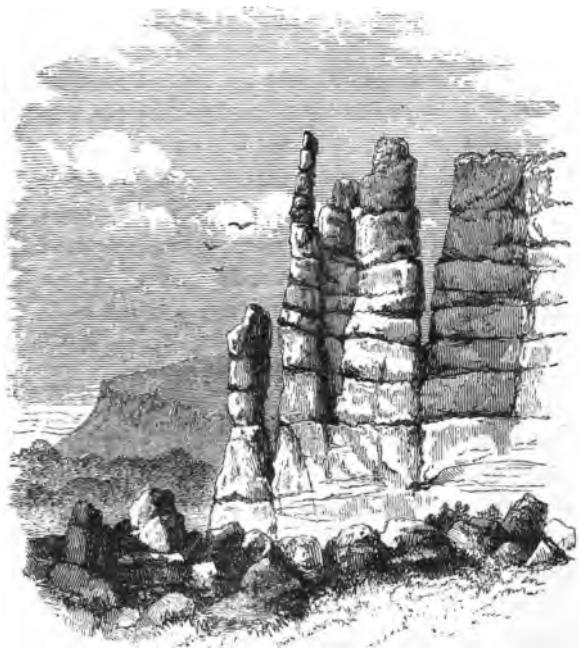
Hence arise some curious and interesting effects of frost upon the ground. If you walk along a road just after frost, you see that the small stones have been partly pushed out of their beds, and that the surface of the road is now a layer of fine mud. The frost has separated the grains of sand and clay, as if they had been pounded down in a mortar. Hence frost is of great service to the farmer in breaking up the soil, and opening it out for roots and fibres of plants. When a surface of rock has been well soaked with rain, and is then exposed to frost, the grains of the rock undergo the same kind of pressure from the freezing of the

water in the pores between them. They are not so loose and open, however, as those of the soil are, and they withstand the action of the frost much better. Of course, the most porous rocks, or those which hold most water, are most liable to the effects of this action. Porous rocks, such as sandstone, are often liable to rapid decay from frost. The stone has crust after crust peeled off from it, or its grains are loosened from each other and washed away by rain.

Again, water freezes not only between the component grains but in the numerous crevices or joints, as they are called, by which rocks are traversed. You have, perhaps, noticed that on the face of a cliff, or in a quarry, the rock is cut through by lines running more or less in an upright direction, and that by means of these lines the rock is split up by nature, and can be divided by the quarryman into large four-sided blocks or pillars. These lines or joints form passages for water in descending from the surface. You can understand that only a very little water may be admitted at a time into a joint. But by degrees the joint widens a little, and allows more water to enter. Every time the water freezes it tries hard to push asunder the two sides of the joint. After many winters, it is at last able to separate them a little; then more water enters, and more force is exerted in freezing, until at last the block of rock traversed by the joint is completely split up. When this takes place along the face of a cliff, one of the loosened parts may fall off and actually roll down to the bottom of the precipice.

This kind of waste is represented in the accompany-

ing woodcut, which gives a section of a cliff wherein the rocks are traversed by perpendicular joints. These have been widened along the front until large blocks have been wedged off, and have fallen to the ground. In



countries exposed to severe winters, the waste caused by frosts along lines of steep cliff is often enormous.

In addition to carbonic acid, oxygen, and frost, there are still other influences at work by which the surface of

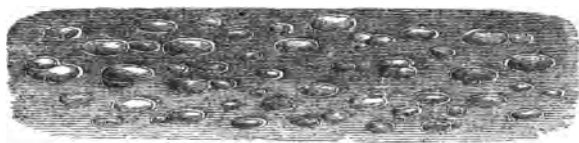
the earth is made to crumble. For example, when, during the day, rocks are highly heated by strong sunshine, and then during night are rapidly cooled by radiation, the alternate expansion and contraction caused by the extremes of temperature loosen the particles of the stone, causing them to crumble away, or even making successive crusts of the stone fall off. Again; rocks which are at one time well soaked with rain, and at another time are liable to be dried by the sun's rays and by wind, are apt to crumble away.

And thus you see that from a variety of causes the solid rocks of the earth are liable to continual decay and removal. The hardest stone, as well as the softest, must yield in the end and moulder down. They do not all indeed decay at the same rate. If you look more narrowly at the wall of an ancient building, you will see almost every variety in the degree of decay. Some of the stones are hardly worn at all, while others are almost wholly gone. As this takes place in a building, you may be sure it must take place also in nature, and that cliffs or crags formed of one kind of stone will crumble down faster than others, and will do so in a different kind of way.

Besides its *chemical* action, rain has also a *mechanical* action. Watch what happens when the first pattering drops of a shower begin to fall upon a smooth surface of sand, such as that of a beach. Each drop makes a little dint or impression. It thus forces aside the grains of sand. On sloping ground, where the drops can run

together and flow downward, they are able to push or carry the particles of sand or clay along. This is called a mechanical action ; while the actual solution of the particles, as you would dissolve sugar or salt, is a chemical action. Each drop of rain may act in either or both of these ways.

Now you will readily see how it is that rain does so much in the destruction of rocks. It not only dissolves out some parts of them, and leaves a crumbling crust on the surface, but it washes away this crust, and thereby exposes a fresh surface to decay. There is in this way



a continual pushing along of powdered stone over the earth's surface. Part of this material accumulates in hollows, and on sloping or level ground ; part is swept into the rivers, and carried away into the sea.

It is this crumbled stone of which all our soils are made, mingled with the remains of plants and animals. Soils differ, therefore, according to the kind of rock out of which they have been formed. Sandstone, for example, will give rise to a sandy soil ; limestone to a limy or calcareous soil ; clay rocks to a clayey soil.

But for this crumbling of the rocks into soil, the land would not be covered with verdure as it is. Bare sheets

of undecaying stone would give no footing for the roots of plants. But by the decay of their surface, they get covered with fertile soil, all over the valleys and plains, and only where, as in steep banks and cliffs, they rise too abruptly to let their crumbled remains gather round them, do they stand up naked and verdureless.

As the mouldering of the surface of the land is always going on, there is a constant formation of soil. Indeed, if this were not the case, if, after a layer of soil had been formed upon the ground, it were to remain there unmoved and unrenewed, the plants would by degrees take out of it all the earthy materials they could and leave it in a barren or exhausted state. But some of it is being slowly carried away by rain, fresh particles from mouldering rocks are washed over it by the same agent, while the rock or sub-soil underneath is all the while decaying into soil. The loose stones, too, are continually crumbling down and making new earth. And thus, day by day, the soil is slowly renewed.

Plants, also, help to form and renew the soil. They send their roots among the grains and joints of the stones, and loosen them. Their decaying fibres supply most of the carbonic acid by which these stones are attacked, and furnish also most of the organic matter in the soil. Even the common worms which you see when you dig up a spadeful of earth, are of great service in mixing the soil and bringing what lies underneath up to the surface.

When we think about this decay and renewal of soil, we see that in reality the whole surface of the land may

be looked upon as travelling downward or seaward. The particles worn from the sides and crests of the high mountains may take hundreds or thousands of years on the journey; they may lie for a long time on the slopes; they may then be swept down and form part of the soil of the valleys; thence they may be in after years borne away and laid down on the bed or bank of a river; and thus, after many halts by the way, they at last reach the sea.

In order to form some idea of the extent to which the surface of the land is cleared of its loose soil by rain, you should notice what takes place even in this country after every series of heavy showers. Each little runnel and brook becomes muddy and discoloured from the quantity of soil, that is, decayed rock, which is washed into it by the rain from the neighbouring slopes. The mud which darkens the water is made of the finer particles of the decomposed rocks; the coarser parts are moving along at the bottom of the water. When you watch these streamlets at their work, and when you remember that what they are doing now they have been doing for ages past, you will understand how greatly the surface of a country may come to be changed by the action of what at first seems so insignificant a thing as Rain.

PROFESSOR ARCHIBALD GEIKIE.

(Adapted.)

<i>vè-ge-ta-ble</i>	<i>pärt-i-cles</i>	<i>scùlp-ture</i>
<i>ma-tér-i-als</i>	<i>chär-ac-ter</i>	<i>ra-viné' (-vén)</i>
<i>sur-round'-ing</i>	<i>má-son-ry</i>	<i>wa'-ter-course</i>
<i>gèn-er-à-tions</i>	<i>còn-tra-ry</i>	<i>stèad-fast-ness</i>
<i>prë-clse-ly</i>	<i>ce-mènt-ing</i>	<i>mould'-er-ing</i>
<i>dis-col'-oured (-cùl-)</i>	<i>ac-quaint'-ed</i>	<i>clày'-ey</i>
<i>cär-bòn-ic</i>	<i>òx-y-gen.</i>	

dif-fused, spread abroad, poured or sent out in all directions. Lat. *dif (dis)*, and *fusum*, "to pour."

in-scrip-tions, words inscribed, carved or written—on monuments, buildings, &c. Lat. *in*, "in, upon," and *scriptum*, "to write."

com-mém-or-ate, to keep in mind, to call to remembrance.

chém-ic-al (kém-), belonging to chemistry; as regarded by chemistry,—the science that considers the nature and component parts of bodies, and the circumstances of their uniting together or breaking up and separating.

cär-bòn-ic, of, or obtained from, carbon. One part of carbon combined with two of oxygen and mixed with water forms "carbonic acid."

acid (às-id), lit. "sour (sub-

stance)." Lat. *acidus*, sharp, sour, biting.

abs-tràct-ed, drawn away from. Lat. *abs*, "from, away," and *tractum*, "to draw."

dis-sòlve, loosen, separate into its parts, break up by means of a liquid. Lat. *dis*, "asunder," and *solvo*, "I loose."

sol-u'-tion, dissolving, loosening in pieces, by a liquid. Lat. *solutum*, "to loose."

dë-com-pòse, dissolve, separate into the component parts, cause to decay. Lat. *dë*, "down," negating the action of the verb "compose"; *com*, "together," and *positum*, "to place."

cor-ród-ed, gnawed, fretted, scraped, or eaten away. Lat. *cor (con)*, "together," and *rodere*, "to gnaw"; "gnawed in pieces."

pór-ous, full of pores, or minute holes or openings. Lat.

porus, Greek *poros* from *peiro*, "I pierce."
per-vad-ing, filling, going through every part. Lat. *per*, "through," and *vado*, "I go."
crév-ice, a crack, or cleft.
rād-i-ā-tion, sending forth rays (Lat. *radius*, "a ray") of light or heat.
ex-pān-sion, spreading out, swelling. Lat. *ex*, "out," and *pansum*, "to spread."
con-trac-tion, drawing together, so as to occupy less room; the opposite of "expansion." Lat. *con*, "together," and *tractum*, "to draw."
me-chān-ic-al, opposite to "chemical"; as done by a machine (Greek, *mechanē*); according to the laws of me-

chanics,—the science that treats of forces and their action, whether directly or through machinery.
ac-cum'-ūl-ates (-*kyûm*-), gathers in heaps or masses. Lat. *ac* (*ad*), "to," and *cumulo*, "I heap up," from *cumulus*, "a heap, or mound."
cal-cār-e-ous, limy. Lat. *calx*, "lime."
verd-ure-less, without verdure, or green growths. French, *verd* (or *vert*), Lat. *viridis*, "green."
ex-haust'-ed, worn out, having all its strength drawn out. Lat. *ex*, "out," and *haustum*, "to draw."
in-sig-ni-fic-ant, not signifying anything; of no consequence or importance.

STARS.

THEY glide upon their endless way,
 For ever calm, for ever bright;
 No blind hurry, no delay,
 Mark the Daughters of the Night:
 They follow in the track of Day,
 In divine delight.

Shine on, sweet orb'd Souls for aye,
For ever calm, for ever bright :
We ask not whither lies your way,
Nor whence ye came, nor what your light.
Be—still a dream throughout the day,
A blessing through the night.

BARRY CORNWALL.

THE CONVERSION OF THE ENGLISH.

[THE fight between the Britons and their invaders was a long and stubborn one; and it was not till the end of the sixth century that the eastern half of Britain had become a country of Englishmen. But these Englishmen were broken up into many separate tribes, and were far from being as yet a single people. To bring about their union into one nation was the work of many hundred years; but the first great step made in it was the binding all the English tribes together in one Christian religion. At their conquest they had been heathen, worshipping Woden and other gods, from whom they believed their kings to have sprung, and thus their winning of Britain had driven Christianity from the land. But Gregory the Great, a bishop of Rome, who had long cherished the hope of converting them at last, sent a band of missionaries to Kent, one of the kingdoms which the English had set up in Britain, whose King Æthelberht had married a Christian wife. Their conversion of Kent was a starting-point for the conversion of Britain. (J. R. GREEN.)]

SOME time before Gregory became Pope, perhaps about the year 574, he went one day through the market at Rome, where among other things, there were still men,

women, and children to be sold as slaves. He there saw some beautiful boys who had just been brought by a slave-merchant, boys with a fair skin and long fair hair, as English boys then would have. He asked from what part of the world they came, and whether they were



Christians or heathens. He was told that they were heathen boys from the Isle of Britain. Gregory was sorry to think that forms which were so fair without should have no light within, and he asked again what was the name of their nation. "*Angles*," he was told.

"*Angles*," said Gregory ; " they have the faces of *Angels*, and they ought to be made fellow-heirs of the angels in heaven. But of what province or tribe of the Angles are they ? " " Of *Deira*," said the merchant. "*De irá !*" said Gregory : " then they must be delivered from the wrath of God. And what is the name of their King ? " " *Ælla*." "*Ælla* ; then *Alleluia* shall be sung in his land." Gregory then went to the Pope, and asked him to send missionaries into Britain, of whom he himself would be one, to convert the English. The Pope was willing, but the people of Rome, among whom Gregory was a priest and was much beloved, would not let him go. So nothing came of the matter for some while.

We do not know whether Gregory was able to do anything for the poor little English boys whom he saw in the market, but he certainly never forgot his plan for converting the English people. After a while he became pope himself. Of course he now no longer thought of going into Britain himself, as he had enough to do at Rome. But he now had power to send others. He therefore presently sent a company of monks, with one called Augustine at their head, who became the first Archbishop of Canterbury, and is called the Apostle of the English. This was in 597. The most powerful king in Britain at that time was Æthelberht of Kent, who is said to have been lord over all the kings south of the Humber. This Æthelberht had done what was very seldom done by English kings then or for a long time after : he had married a foreign wife, the daughter

of Chariberht, one of the kings of the Franks in Gaul. Now the Franks had become Christians; so when the Frankish Queen came over to Kent, Æthelberht promised that she should be allowed to keep to her own religion without let or hindrance. She brought with her therefore a Frankish Bishop named Liudhard, and the Queen and her Bishop used to worship God in a little church, near Canterbury, called Saint Martin's, which had been built in the Roman times. So you see that both Æthelberht and his people must have known something about the Christian faith before Augustine came. It does not, however, seem that either the King or any of his people at all thought of turning Christians. This seems strange when one reads how easily they were converted afterwards. One would have thought that Bishop Liudhard would have been more likely to convert them than Augustine, for, being a Frank, he would speak a tongue not very different from English, while Augustine spoke Latin, and, if he ever knew English at all, he must have learned it after he came into the island. I cannot tell you for certain why this was. Perhaps they did not think that a man who had merely come in the Queen's train was so well worth listening to as one who had come on purpose all the way from the great city of Rome, to which all the West still looked up as the capital of the world.

So Augustine and his companions set out from Rome, and passed through Gaul, and came into Britain, even as Cæsar had done ages before. But this time Rome had sent forth men not to conquer lands, but to win souls.

They landed first in the Isle of Thanet, which joins close to the east part of Kent, and thence they sent a message to King Æthelberht saying why they had come into his land. The King sent word back to them to stay in the isle till he had fully made up his mind how to treat them; and he gave orders that they should be well taken care of meanwhile. After a little while he came himself into the isle, and bade them come and tell him what they had to say. He met them in the open air, for he would not meet them in a house, as he thought they might be wizards, and that they might use some charm or spell, which he thought would have less power out of doors. So they came, carrying an image of our Lord on the Cross wrought in silver, and singing litanies as they came. And when they came before the King, they preached the Gospel to him and to those who were with him, telling them, no doubt, how there was one God, who had made all things, and how He had sent his son Jesus Christ to die upon the cross for mankind, and how He would come again at the end of the world to judge the quick and the dead.

So King Æthelberht hearkened to them, and he made answer like a good and wise man. "Your words and promises," said he, "sound very good unto me; but they are new and strange, and I cannot believe them all at once, nor can I leave all that I and my fathers and the whole English folk have believed so long. But I see that ye have come from a far country to tell us that which ye yourselves hold for truth; so ye may stay in the land, and I will give you a house to dwell in and food to

eat; and ye may preach to my folk, and if any man of them will believe as ye believe, I hinder him not." So he gave them a house to dwell in in the royal city of Canterbury, and he let them preach to the people. And, as they drew near to the city, they carried their silver image of the Lord Jesus, and sang litanies, saying, "We pray Thee, O Lord, let Thy anger and Thy wrath be turned away from this city, and from Thy holy house, because we have sinned. Alleluia!" Thus Augustine and his companions dwelt at Canterbury, and worshipped in the old church where the Queen worshipped, and preached to the men of the land. And many men hearkened to them and were baptized, and before long King Æthelberht himself believed and was baptized; and before the year was out there were added to the Church more than ten thousand souls.

E. A. FREEMAN.

strīb-born

chrìst-i-an

chrìst-i-àn-i-ty

re-lì-gion

con'-quest

héath-en

wor'-ship

bìsh-op

fòr-eign

be-liéved

prò-mised

pow'-er-fùl

con-vèr-sion, turning (to the Christian faith), change (of religious views). Lat. *con*, "together," and *verto*, "I turn."

in-vád-ers, men that enter as enemies, and take to their own use the country (or possessions) of another people.

Lat. *in*, "into," and *vado*, "I go."

chèr-ished, nourished, encouraged, fondly maintained, held dear. French *chérir*, from *cher*, "dear" (Lat. *carus*).

mis-sion-ar-ies, persons sent on a mission to foreign lands,—

especially to spread the knowledge of a religion.

Lat. *missum*, "to send."

Angles, old English "Engle."

Lat. *Angli*. Hence the adjective "English."

De-i-ra, the present Yorkshire.

De-ira, Lat. "from the ire, or wrath."

monk, a member of a religious body living chiefly apart from the world. Lat. *monachus*, Greek *monachos*, from *monos*, "alone."

arch-bish-op, a chief bishop; a bishop ruling in religious matters over a province or large district, with bishops under him. Greek *archos*, "chief"; "bishop," old English *biscop*, is Greek *episkopos*, "an overseer" (from *epi*, "over," and *skopeo* "I look").

a-pòstle (*a-pòsl*), one sent away on a mission of importance, —especially of religion; a missionary. Greek *apòstolos*, from *apo*, "off, away," and *stello*, "I send."

Châr-i-berht. The modern form with us is Herbert.

Franks in Gaul. "The Franks had conquered Roman Gaul [modern France, roughly speaking] as the English had conquered Roman Britain." (J. R. GREEN.)

without let or hindrance. "Let" means "hindrance." Compare Romans, i, 13: "often-times I proposed to come unto you, but was *let* hitherto."

mèss-age, notice or word sent. French, from Lat. *missaticum*, from *missum*, "to send."

wizard, literally a *wise-sayer*; a prophet, conjurer, fore-teller. What is the feminine word corresponding?

lit-an-ies, prayers. French *litanie*, from Greek *litaneia*, "supplication."

the quick, the living.

bap-tized, admitted into the church by the rite of baptism —dipping in water or sprinkling with water. Greek *bapto*, "I dip."



BISHOP HATTO.

THE summer and autumn had been so wet,
That in winter the corn was growing yet;
'Twas a piteous sight to see all around
The grain lie rotting on the ground.

Every day the starving poor
Crowded around Bishop Hatto's door,
For he had a plentiful last year's store,
And all the neighbourhood could tell
His granaries were furnished well.

At last Bishop Hatto appointed a day
To quiet the poor without delay ;
He bade them to his great barn repair,
And they should have food for the winter there.

Rejoiced such tidings good to hear,
The poor folk flocked from far and near ;
The great barn was full as it could hold
Of women and children, and young and old.

Then when he saw it could hold no more,
Bishop Hatto he made fast the door ;
And while for mercy on Christ they call,
He set fire to the barn and burnt them all.

“ I’ faith, ’tis an excellent bonfire ! ” quoth he,
“ And the country is greatly obliged to me,
For ridding it in these times forlorn,
Of rats, that only consume the corn.”

So then to his palace returned he,
And he sat down to supper merrily,
And he slept that night like an innocent man ;
But Bishop Hatto never slept again.

In the morning as he enter’d the hall,
Where his picture hung against the wall,
A sweat like death all over him came,
For the rats had eaten it out of the frame.

As he look'd there came a man from the farm,
He had a countenance white with alarm ;
" My lord, I open'd your granaries this morn,
And the rats had eaten all your corn."

Another came running presently,
And he was pale as pale could be,
" Fly ! my Lord Bishop, fly," quoth he,
" Ten thousand rats are coming this way—
The Lord forgive you for yesterday ! "

" I'll go to my tower on the Rhine," replied he,
" 'Tis the safest place in Germany ;
The walls are high, and the shores are steep,
And the stream is strong, and the water deep."

Bishop Hatto fearfully hasten'd away,
And he cross'd the Rhine without delay,
And reach'd his tower, and barr'd with care
All the windows, doors, and loopholes there.

He laid him down and closed his eyes,
But soon a scream made him arise ;
He started, and saw two eyes of flame
On his pillow from whence the screaming came.

He listen'd and look'd ; it was only the cat ;
But the Bishop he grew more fearful for that,
For she sat screaming, mad with fear,
At the army of rats that was drawing near.

For they have swum over the river so deep,
 And they have climb'd the shores so steep,
 And up the tower their way is bent
 To do the work for which they were sent.

They are not to be told by the dozen or score,
 By thousands they come, and by myriads and more;
 Such numbers had never been heard of before,
 Such a judgment had never been witness'd of yore.

Down on his knees the Bishop fell,
 And faster and faster his beads did he tell,
 As louder and louder drawing near
 The gnawing of their teeth he could hear.

And in at the windows, and in at the door,
 And through the walls helter-skelter they pour,
 And down from the ceiling, and up through the floor,
 From the right and the left, from behind and before,
 From within and without, from above and below,
 And all at once to the Bishop they go.

They have whetted their teeth against the stones,
 And now they pick the Bishop's bones;
 They gnaw'd the flesh from every limb,
 For they were sent to do judgment on him.

SOUTHEY.

au'-tumn (ō-tum)

pît-e-ous

plên-ti-fül

neigh'-bour-hood

gnaw (nō).

ap-point'-ed

re-joiced'

ob-liged

coun'-ten-ance

gnaw'-ing.

yês-ter-day

re-plied

fêar-fül-ly

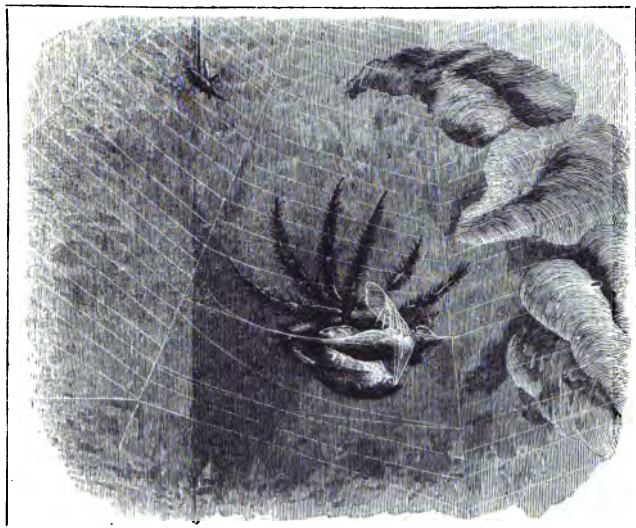
wît-nessed

gnawed.

stärv'-ing, dying of hunger.
grän-ar-y, barn ; building for
 storing grain.
for-lörn, lost ; miserable.
con-súme, eat up, destroy.
in-no-cent, guiltless, blameless ;
 free from crime or evil-

doing. Lat. *in*, "not," and
nocens, "hurting."
told, by the dozen, &c. ; counted.
mýr-i-ads, tens of thousands ;
 countless numbers.
of yore, of olden time ; long
 ago, anciently.

*Relate in your own words the crime and the punishment
 of Bishop Hatto.*



SAGACITY OF THE SPIDER.

ANIMALS in general are sagacious in proportion as they cultivate society. The elephant and the beaver

show the greatest signs of this when united ; but when man intrudes into their communities, they lose all their spirit of industry, and testify but a very small share of that sagacity for which, when in a social state, they are so remarkable.

Among insects, the labours of the bee and the ant have employed the attention and admiration of the naturalist ; but their whole sagacity is lost upon separation, and a single bee or ant seems destitute of every degree of industry, is the most stupid insect imaginable, languishes for a time in solitude, and soon dies.

Of all the solitary insects I have ever remarked, the spider is the most sagacious, and its actions to me, who have attentively considered them, seem almost to exceed belief. This insect is formed by nature for a state of war, not only upon other insects, but upon each other. For this state, nature seems perfectly well to have formed it. Its head and breast are covered with a strong natural coat of mail, which is impenetrable to the attempts of every other insect ; and its belly is enveloped in a soft, pliant skin, which eludes the sting even of a wasp. Its legs are terminated by strong claws, not unlike those of a lobster ; and their vast length, like spears, serves to keep every assailant at a distance.

Not worse furnished for observation than for an attack or a defence, it has several eyes, large, transparent, and covered with a horny substance, which, however, does not impede its vision. Besides this, it is furnished with a forceps above the mouth, which

serves to kill or secure the prey already caught in its claws or its net.

Such are the implements of war with which the body is immediately furnished : but its net to entangle the enemy seems what it chiefly trusts to, and what it takes most pains to render as complete as possible. Nature has furnished the body of this little creature with a glutinous liquid, which, proceeding from the hinder portion of the body, it spins into thread, coarser or finer, as it chooses to contract or dilate the surrounding muscles. In order to fix its thread when it begins to weave it emits a small drop of its liquid against the wall, which, hardening by degrees, serves to hold the thread very firmly. Then receding from the first point, as it recedes the thread lengthens ; and when the spider has come to the place where the other end of the thread should be fixed, gathering up with its claws the thread, which would otherwise be too slack, it is stretched tightly, and fixed in the same manner to the wall as before.

In this manner it spins and fixes several threads parallel to each other, which, so to speak, serve as the warp to the intended web. To form the woof, it spins in the same manner its thread, transversely fixing one end to the first thread that was spun, and which is always the strongest of the whole web, and the other to the wall. All these threads, being newly spun, are glutinous, and therefore stick to each other wherever they happen to touch ; and, in those parts of the web most exposed to be torn, our natural artist strengthens them, by doubling the threads sometimes sixfold.

Thus far naturalists have gone in the description of this animal: what follows is the result of my own observation upon that species of the insect called the house spider. I perceived, about four years ago, a large spider in one corner of my room, making its web; and though the maid frequently levelled her fatal broom against the labours of the little animal, I had the good fortune then to prevent its destruction; and, I may say, it more than paid me by the entertainment it afforded.

In three days, the web was, with incredible diligence, completed; nor could I avoid thinking that the insect seemed to exult in its new abode. It frequently traversed it round, examined the strength of every part of it, retired into its hole, and came out very frequently. The first enemy, however, it had to encounter was another, and a much larger spider, which, having no web of its own, and having probably exhausted all its stock in former labours of this kind, came to invade the property of its neighbour. Soon, then, a terrible encounter ensued, in which the invader seemed to have the victory, and the laborious spider was obliged to take refuge in its hole. Upon this, I perceived the victor using every art to draw the enemy from his stronghold. He seemed to go off, but quickly returned; and when he found all arts vain, began to demolish the new web without mercy. This brought on another battle, and, contrary to my expectations, the laborious spider became conqueror, and fairly killed his antagonist.

Now, then, in peaceable possession of what was justly its own, it waited three days with the utmost impatience, repairing the breaches of its web, and taking no sustenance that I could perceive. At last, however, a large blue fly fell into the snare, and struggled hard to get loose. The spider gave it leave to entangle itself as much as possible, but it seemed to be too strong for the cobweb. I must own I was greatly surprised when I saw the spider immediately sally out, and, in less than a minute, weave a new net round its captive, by which the motion of its wings was stopped; and when it was fairly hampered in this manner, it was seized, and dragged into the hole.

In this manner it lived in a precarious state; and Nature seemed to have fitted it for such a life, for upon a single fly it subsisted for more than a week. I once put a wasp into the net; but, when the spider came out in order to seize it as usual, upon perceiving what kind of an enemy it had to deal with, it instantly broke all the bands that held it fast, and contributed all that lay in its power to disengage so formidable an antagonist. When the wasp was at liberty, I expected the spider would have set about repairing the breaches that were made in its net; but those, it seems, were irreparable; wherefore the cobweb was now entirely forsaken, and a new one begun, which was completed in the usual time.

I had now a mind to try how many cobwebs a single spider could furnish; wherefore I destroyed this, and the insect set about another. When I destroyed the

other also, its whole stock seemed entirely exhausted, and it could spin no more. The arts it made use of to support itself, now deprived of its great means of subsistence, were indeed surprising. I have seen it roll up its legs like a ball, and lie motionless for hours together, but cautiously watching all the time ; when a fly happened to approach sufficiently near, it would dart out all at once, and often seize its prey.

Of this life, however, it soon began to grow weary, and resolved to invade the possession of some other spider, since it could not make a web of its own. It formed an attack upon a neighbouring fortification with great vigour, but at first was as vigorously repulsed. Not daunted, however, with one defeat, in this manner, it continued to lay siege to another's web for three days, and at length, having killed the defendant, actually took possession. When smaller flies happen to fall into the snare, the spider does not sally out at once, but very patiently waits till it is sure of them ; for, upon his immediately approaching, the terror of his appearance might give the captive strength sufficient to get loose : the manner, then, is to wait patiently till, by ineffectual and impotent struggles, the captive has wasted all his strength, and then he becomes a certain and easy conquest.

The insect I am now describing lived three years ; every year it changed its skin, and got a new set of legs. I have sometimes plucked off a leg, which grew again in two or three days. At first it dreaded my approach to its web, but at last it became so familiar as to take a fly

out of my hand ; and upon my touching any part of the web, would immediately leave its hole, prepared either for a defence or an attack.

To complete this description, it may be observed that the male spiders are much less than the female, and that the latter are oviparous. When they come to lay, they spread a part of their web under the eggs, and then roll them up carefully, as we roll up things in a cloth, and thus hatch them in their hole. If disturbed in their holes, they never attempt to escape without carrying this young brood in their forceps away with them, and thus frequently are sacrificed to their parental affection.

As soon as ever the young ones leave their artificial covering, they begin to spin, and almost sensibly seem to grow bigger. If they have the good fortune, when even but a day old, to catch a fly, they fall to with good appetites ; but they live sometimes three or four days without any sort of sustenance, and yet still continue to grow larger, so as every day to double their former size. As they grow old, however, they do not still continue to increase, but their legs only continue to grow longer ; and when a spider becomes entirely stiff with age, and unable to seize its prey, it dies at length of hunger.

GOLDSMITH.

cùl-ti-vate

so-ci-e-ty

in-trúdes

com-mun-i-ty

in-dus-try

nát-úr-al-ist

sòl-i-tude

im-pèn-e-tra-ble

en-vel-oped

<i>tèr-min-ate</i>	<i>ex-haust'-ed</i>	<i>fôr-mid-a-ble</i>
<i>trans-pâr-ent</i>	<i>la-bôr-i-ous</i>	<i>fôr-ti-fic-a-tion</i>
<i>im-plè-ments</i>	<i>sub-sist-ence</i>	<i>sac-ri-ficed</i>
<i>di-li-gence</i>	<i>con-trib-ute</i>	<i>âr-ti-fî-cial</i>

sa-gà-cious, possessing or showing *sa-gà-ci-ty*; shrewd, far-seeing, wise.

tèst-i-fy, bear witness to, give proof of, show. Lat. *testis*, "a witness," and French *-fier*, Lat. *facere*, "to make."

dè-sti-tute of, altogether without, in utter want of.

làn-guish-es, droops, pines, loses strength and activity.

those of a lobster. Substitute the noun that "those" stands for.

How would you express the meaning in the absence of both the noun and "those"?

as-sail-ant, one that assails or attacks. French *assaillir*, "to assault," from Lat. *ad*, "to, towards, upon," and *salio*, "I leap."

fôr-ceps, a pair of tongs or pincers.

glú-tin-ous, gluey, sticky.

di-lâ-te, the opposite of "contract"; expand, widen.

re-cède, go back. Lat. *re*, "back," and *cedo*, "I go."

pâr-all-el, running in the same direction with another, and always at the same distance

from it. Greek *para*, "side by side, alongside of," and *allélôn*, "one another."

trans-verse-ly, cross-wise; in a direction crossing the first threads. Lat. *trans*, "across," and *versus*, "turned."

en-ter-tain'-ment, amusement, pleasure.

in-créd-i-ble, that cannot be believed; beyond or exceeding belief. Lat. *credo*, "I believe."

ex-ult, rejoice, be exceedingly glad. Lat. *exulto*, from *ex*, "out," and *saltum*, "to leap, jump."

trà-verse, go across, pass over. Lat. *tra* (*trans*), "across," and *versum*, "to turn." Compare "transversely," above.

en-coun'-ter, to meet, suddenly or as an enemy. French *encontre*, "an adventure"; from *en*, "in, upon," and *contre* (Lat. *contra*), "against."

en-sued, followed (as a consequence), came after.

dè-mòl-ish, pull down, destroy.

ant-àg-on-ist, opponent, adver-

sary. Greek *anti*, "against," and *agonistes*, "one that contends."

sùs-ten-ance, what sustains or supports one; food.

pre-cú-ri-ous, very uncertain; dangerously doubtful.

sub-sist-ed, lived.

dis-en-gáge, let loose, set free.

Observe the force of the prefix "dis" (asunder, away).

ir-ré-par-a-ble, that cannot be repaired, or made good.

Lat. *ir* (= *m*), "not," *re*, "again," *paro*, "I prepare, or arrange."

o-vi-par-ous, hatching young ones from eggs. Lat. *ovum*, "egg," and *pario*, "I bring forth." "Viviparous" means "bringing forth young alive (*vivus*)."

ap-pet-ite, desire for food.

Lat. *ad*, "to," and *peto*, "I seek, or desire."

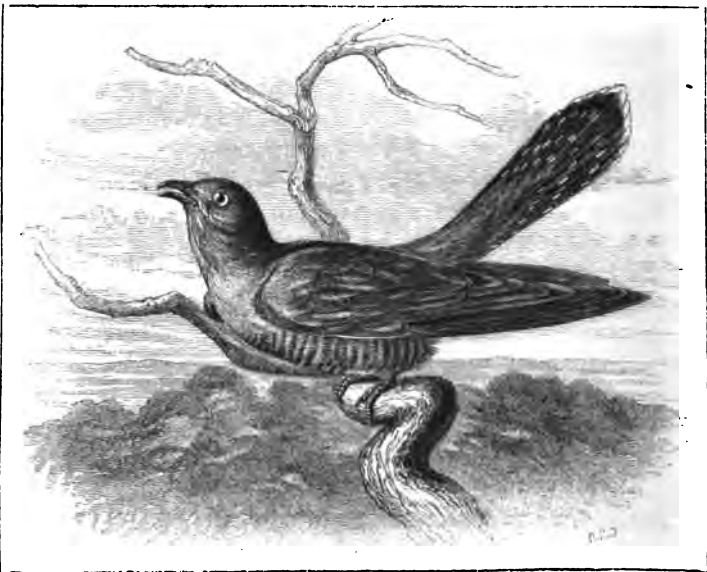
EXERCISE:—Vary these sentences: (1) "Animals in general are sagacious in proportion as they cultivate society." (2) "Their whole sagacity is lost upon separation."

SPRING SONGS OF BIRDS.

HARK how loud the woods
 Invite you forth in all your gayest trim!
 Lend me your song, ye nightingales! O pour
 The mazy-running soul of melody
 Into my varied verse! while I deduce,
 From the first note the hollow cuckoo sings,
 The symphony of Spring, and touch a theme
 Unknown to fame—the passion of the groves.

When first the soul of love is sent abroad,
 Warm through the vital air, and on the heart
 Harmonious seizes, the gay troops begin,

In gallant thought, to plume the painted wing;
And try again the long-forgotten strain,
At first faint-warbled. But no sooner grows
The soft infusion prevalent, and wide,
Than, all alive, at once their joy o'erflows



In music unconfin'd. Up springs the lark,
Shrill-voiced, and loud, the messenger of morn;
Ere yet the shadows fly, he mounted sings
Amid the dawning clouds, and from their haunts
Calls up the tuneful nations. Every copse
Deep-tangled, tree irregular, and bush

Bending with dewy moisture, o'er the heads
 Of the coy quiristers that lodge within,
 Are prodigal of harmony. The thrush
 And woodlark, o'er the kind-contending throng
 Superior heard, run through the sweetest length
 Of notes; when listening Philomela deigns
 To let them joy, and purposes, in thought
 Elate, to make her night excel their day.
 The blackbird whistles from the thorny brake;
 The mellow bullfinch answers from the grove;
 Nor are the linnets, o'er the flowering furze
 Pour'd out profusely, silent. Join'd to these,
 Innumerable songsters, in the freshening shade
 Of new-spring leaves, their modulations mix
 Mellifluous. The jay, the rook, the daw,
 And each harsh pipe, discordant heard alone,
 Aid the full concert: while the stock-dove breathes
 A melancholy murmur through the whole.

THOMSON.

<i>níght-in-gales</i>	<i>in-víte</i>	<i>warbled (wōrbld)</i>
<i>mél-od-y</i>	<i>gay'-est</i>	<i>dawn'-ing (dōn-)</i>
<i>hār-mon-y</i>	<i>mèss-en-ger</i>	<i>haunts (hōnts)</i>
<i>hār-món-i-ous</i>	<i>moist'-ure</i>	<i>deigns (dánz)</i>
<i>un-con-fined</i>	<i>sòng-sters</i>	<i>daw (dō)</i>

máz-y-rùn-ning, running in mazes; running, like network, through and through (my verse) in all directions. *de-duce'*, draw out from. Lat. *de*, "down, from," and *duco*, "I lead, or draw." *sým-phon-y*, harmony, union of many sounds. Greek *sym*

(*syn*), "together," and *phóné*, "sound."

pàs-sion, lit. suffering; great excitement of mind, strong feeling (especially love, or anger).

in-fú-sion, in-pouring (here, of "the soul of love").

prè-val-ent, overpowering; or general. Lat. *præ*, "before, or over," and *valeo*, "I am strong."

coy, shy, bashful.

quir-ist-ers, singers in a quire (or choir).

pròd-ig-al, carelessly liberal, lavish.

Phil-o-mé-la, the nightingale; so called from Philomela, daughter of Pandion, King of Attica, who, according to

the fable, was turned into a nightingale.

e-láte, in high spirits. Lat. *e*, "out," and *latum*, "brought."

pro-fuse-ly, with reckless liberality, prodigally. Lat. *pro*, "forth," and *fusum*, "to pour."

in-nu'-mer-ous, innumerable; too many to be counted.

mòd-ùl-à-tions, harmoniously varied tones. Lat. *modus*, "measure, manner."

mel-li-flù-ous, sweetly flowing. Lat. *mel*, "honey," and *fluo*, "I flow."

dis-còrd-ant, harsh, breaking the harmony. Lat. *dis*, "asunder," and *cord*, "the heart."

mèl-an-chol-y, sad, sorrowful.

Write out the lesson (in several exercises) in prose, in many parts expressing the meaning at greater length.

BIRDS'-NESTING.

AFTER dinner the Madman is busy with the preparations for the expedition, fitting new straps on to his climbing-irons, filling large pill-boxes with cotton-wool, and sharpening East's small axe. The boys carry all their munitions into calling-over, and directly afterwards, having dodged such præposters as are on the look-out for fags at cricket, the four set off at a smart trot down

the Lawford footpath straight for Caldecott's Spinney and the Hawk's nest.

Martin leads the way in high feather; it is quite a new sensation to him, getting companions, and he finds it very pleasant, and means to show them all manner of proofs of his science and skill. Brown and East may be better at cricket and football and games, thinks he, but out in the fields and woods see if I can't teach them something. He has taken the leadership already, and strides away in front with his climbing-irons strapped under one arm, his pecking-bag under the other, and his pockets and hat full of pill-boxes, cotton-wool, and other etceteras. Each of the others carries a pecking-bag, and East his hatchet.

When they had crossed three or four fields without a check, Arthur began to lag; and Tom seeing this shouted to Martin to pull up a bit: "We ain't out Hare-and-hounds—what's the good of grinding on at this rate?"

"There's the Spinney," said Martin, pulling up on the brow of a slope at the bottom of which lay Lawford brook, and pointing to the top of the opposite slope; "the nest is in one of those high fir-trees at this end. And down by the brook there I know of a sedge-bird's nest; we'll go and look at it coming back."

"Oh, come on, don't let us stop," said Arthur, who was getting excited at the sight of the wood; so they broke into a trot again, and were soon across the brook, up the slope, and into the Spinney. Here they advanced as noiselessly as possible, lest keepers or other

enemies should be about, and stopped at the foot of a tall fir, at the top of which Martin pointed out with pride the kestrel's nest, the object of their quest.

"Oh, where! which is it?" asks Arthur, gaping up in the air, and having the most vague idea of what it would be like.

"There, don't you see?" said East, pointing to a lump of mistletoe in the next tree, which was a beech: he saw that Martin and Tom were busy with the climbing-irons, and couldn't resist the temptation of hoaxing. Arthur stared and wondered more than ever.

"Well, how curious! it doesn't look a bit like what I expected," said he.

"Very odd birds, kestrels," said East, looking waggishly at his victim, who was still star-gazing.

"But I thought it was in a fir-tree?" objected Arthur.

"Ah, don't you know? that's a new sort of fir which old Caldecott brought from the Himalayas."

"Really!" said Arthur; "I'm glad I know that—how unlike our firs they are! They do very well too here, don't they? the Spinney's full of them."

"What's that humbug he's telling you?" cried Tom, looking up, having caught the word Himalayas, and suspecting what East was after.

"Only about this fir," said Arthur, putting his hand on the stem of the beech.

"Fir!" shouted Tom, "why, you don't mean to say, young un, you don't know a beech when you see one?"

Poor little Arthur looked terribly ashamed, and East exploded in laughter which made the wood ring.

"I've hardly ever seen any trees," faltered Arthur.

"What a shame to hoax him, Scud!" cried Martin. "Never mind, Arthur, you shall know more about trees than he does in a week or two."

"And isn't that the kestrel's nest then?" asked Arthur.

"That! why, that's a piece of mistletoe. There's the nest, that lump of sticks up this fir."

"Don't believe him, Arthur," struck in the incorrigible East; "I just saw an old magpie go out of it."

Martin did not deign to reply to this sally, except by a grunt, as he buckled the last buckle of his climbing-irons; and Arthur looked reproachfully at East without speaking.

But now came the tug of war. It was a very difficult tree to climb until the branches were reached, the first of which was some fourteen feet up, for the trunk was too large at the bottom to be swarmed; in fact, neither of the boys could reach more than half round it with their arms. Martin and Tom, both of whom had irons on, tried it without success at first; the fir bark broke away where they stuck the irons in as soon as they leant any weight on their feet, and the grip of their arms wasn't enough to keep them up; so, after getting up three or four feet, down they came slithering to the ground, barking their arms and faces. They were furious, and East sat by laughing, and shouting at each failure, "Two to one on the old magpie!"

"We must try a pyramid," said Tom at last. "Now, Scud, you lazy rascal, stick yourself against the tree!"

"I dare say! and have you standing on my shoulders with the irons on: what do you think my skin's made of?" However, up he got, and leant against the tree, putting his head down and clasping it with his arms as far as he could. "Now then, Madman," said Tom, "you next."

"No, I'm lighter than you; you go next." So Tom got on East's shoulders, and grasped the tree above, and then Martin scrambled up on to Tom's shoulders, amidst the totterings and groanings of the pyramid, and, with a spring which sent his supporters howling to the ground, clasped the stem some ten feet up, and remained clinging. For a moment or two they thought he couldn't get up, but then, holding on with arms and teeth, he worked first one iron, then the other, firmly into the bark, got another grip with his arms, and in another minute had hold of the lowest branch.

"All up with the old magpie now," said East; and, after a minute's rest, up went Martin, hand over hand, watched by Arthur with fearful eagerness.

"Isn't it very dangerous?" said he.

"Not a bit," answered Tom; "you can't hurt if you only get good hand-hold. Try every branch with a good pull before you trust it, and then up you go."

Martin was now amongst the small branches close to the nest, and away dashed the old bird, and soared up above the trees, watching the intruder.

"All right—four eggs!" shouted he.

"Take 'em all!" shouted East; "that'll be one apiece."

"No, no! leave one, and then she won't care," said Tom.

We boys had an idea that birds couldn't count and were quite content as long as you left one egg. I hope it is so.

Martin carefully put one egg into each of his boxes and the third into his mouth, the only other place of safety, and came down like a lamplighter. All went well till he was within ten feet of the ground, when, as the trunk enlarged, his hold got less and less firm, and at last down he came with a run, tumbling on to his back on the turf, spluttering and spitting out the remains of the great egg, which had broken by the jar of his fall.

"Ugh, ugh! something to drink—ugh! it was addled," spluttered he, while the wood rang again with the merry laughter of East and Tom.

Then they examined the prizes, gathered up their things, and went off to the brook, where Martin swallowed huge draughts of water to get rid of the taste; and they visited the sedge-bird's nest, and from thence struck across the country in high glee, beating the hedges and brakes as they went along; and Arthur at last, to his intense delight, was allowed to climb a small hedgerow oak for a magpie's nest with Tom, who kept all round him like a mother, and showed him where to hold and how to throw his weight; and though he was

in a great fright, didn't show it ; and was applauded by all for his lissomness.

T. HUGHES.

ex-ped-ì-tion

noise'-less-ly

temp-tà-tion

re-proach'-fùl-ly

pyr-a-mid

sup-pòrt-ers

ex-cit-ed

ad-vànced

hàtch-et

re-sist

fail'-ure

sus-pèct-ing

sci-ence (sí-)

mìstle-toe (mìzl-)

deign (dán)

laugh'-ter (lāf-)

dán-ger-ous

a-shámed

mún-ì-tions (myún-), lit. *fortifications* ; war material ; here, the things necessary for helping them to carry out their project. Lat. *munio*, "I fortify."

sens-à-tion, feeling. Lat. *sensum*, "to feel."

kès-trel, a small bird of the hawk species.

vàgue (vág), indefinite, uncertain, loose.

ý-dé-a, notion, thought.

ex-plòd-ed, burst forth. Lat. *ex*, "out," and *plaudo*, "I clap my hands."

fàlt-er (fòlt-er), to hesitate, to speak hesitatingly, or in feeble tones.

in-còr-ri-gi-ble, beyond correction ; that still goes wrong in spite of all correction or attempts to keep one right.

slith-er-ing, sliding, slipping.

in-trùd-er, one that intrudes, or goes in where he has no business, or is not wanted. Lat. *in*, "into," and *trudo*, "I thrust."

àddled, diseased, rotten, empty.

ap-plaud'-ed, praised, by clapping of hands, cheering, &c. Lat. *ap* (*ad*), "to," and *plaudo*, "I clap my hands." Compare "exploded," above.

lis-som-ness, lithe-some-ness, suppleness, nimbleness.

THE BALLAD OF CARMILHAN.

I.

AT Stralsund, by the Baltic Sea,
Within the sandy bar,
At sunset of a summer's day,
Ready for sea, at anchor lay
The good ship Valdemar.

The sunbeams danced upon the waves,
And played along her side,
And through the cabin windows streamed
In ripples of golden light, that seemed
The ripple of the tide.

There sat the captain with his friends,—
Old skippers brown and hale,
Who smoked and grumbled o'er their grog,
And talked of iceberg and of fog,
Of calm and storm and gale.

And one was spinning a sailor's yarn
About Klaboterman,
The Kobold of the sea; a sprite
Invisible to mortal sight,
Who o'er the rigging ran,

Sometimes he hammered in the hold,
Sometimes upon the mast,
Sometimes abeam, sometimes abaft,
Or at the bows he sang and laughed,
And made all tight and fast.



He helped the sailors at their work,
And toiled with jovial din ;
He helped them hoist and reef the sails,
He helped them stow the casks and bales,
And heave the anchor in.

But woe unto the lazy louts,
The idlers of the crew ;
Them to torment is his delight,
And worry them by day and night,
And pinch them black and blue.

And woe to him whose mortal eyes
Klaboterman behold ;
It is a certain sign of death !—
The cabin-boy here held his breath,
He felt his blood run cold.

II.

The jolly skipper paused a while,
And then again began :
“ There is a Spectre Ship,” quoth he,
“ A ship of the Dead that sails the sea,
And is called the Carmilhan.

“ A ghostly ship, with a ghostly crew,
In tempest she appears ;
And before the gale, or against the gale,
She sails without a rag of sail,
Without a helmsman steers.

“ She haunts the Atlantic north and south,
But mostly the mid-sea,
Where three great rocks rise bleak and bare
Like furnace-chimneys in the air,
And are called the Chimneys Three.

“And ill betide the luckless ship
That meets the Carmilhan ;
Over her decks the seas will leap,
She must go down into the deep,
And perish mouse and man.”

The captain of the Valdemar
Laughed loud with merry heart.
“I should like to see this ship,” said he ;
“I should like to find these Chimneys Three,
That are marked down in the chart.

“I have sailed right over the spot,” he said,
“With a good stiff breeze behind,
When the sea was blue, and the sky was clear,—
You can follow my course by these pinholes here,—
And never a rock could find.”

And then he swore a dreadful oath,
He swore by the Kingdoms Three,
That should he meet the Carmilhan,
He would run her down, although he ran
Right into Eternity !

All this, while passing to and fro,
The cabin-boy had heard ;
He lingered at the door to hear,
And drank in all, with greedy ear,
And pondered every word.

He was a simple country lad,
But of a roving mind ;
" O it must be like heaven," thought he,
" Those far-off foreign lands to see,
And fortune seek and find ! "

But in the fo'castle, when he heard
The mariners blaspheme,
He thought of home, he thought of God,
And his mother under the churchyard sod,
And wished it were a dream.

One friend on board that ship had he ;
'Twas the Klaboterman,
Who saw the Bible in his chest,
And made a sign upon his breast,
All evil things to ban.

III.

The cabin windows have grown blank
As eyeballs of the dead ;
No more the glancing sunbeams burn
On the gilt letters of the stern,
But on the figure-head ;

On Valdemar Victorious,
Who looketh with disdain
To see his image in the tide
Dismembered float from side to side,
And reunite again.

"It is the tide," those skippers cried,
 "That swings the vessel so ;
It is the tide ; it rises fast,
'Tis time to say farewell at last,
 'Tis time for us to go."

They shook the captain by the hand,
 "Good luck ! good luck !" they cried ;
Each face was like the setting sun,
As, broad and red, they one by one,
 Went o'er the vessel's side.

The sun went down, the full moon rose,
 The tide was at its flood ;
And all the winding creeks and bays
And broad sea-meadows seemed ablaze,
 The sky was red as blood.

The south-west wind blew fresh and fair,
 As fair as wind could be ;
Bound for Odessa, o'er the bar,
With all sail set, the Valdemar
 Went proudly out to sea.

The lovely moon climbs up the sky
 As one who walks in dreams ;
A tower of marble in her light,
A wall of black, a wall of white,
 The stately vessel seems.

Low down upon the sandy coast
The lights begin to burn ;
And now, uplifted high in air,
They kindle with a fiercer glare,
And now drop far astern.

The dawn appears, the land is gone,
The sea is all around ;
Then on each hand low hills of sand
Emerge and form another land ;
She steereth through the Sound.

Through Kattegat and Skager-rack
She flitteth like a ghost ;
By day and night, by night and day,
She bounds, she flies upon her way,
Along the English coast.

Cape Finisterre is drawing near,
Cape Finisterre is past ;
Into the open ocean stream
She floats, the vision of a dream
Too beautiful to last.

Suns rise and set, and rise, and yet
There is no land in sight ;
The liquid planets overhead
Burn brighter now the moon is dead,
And longer stays the night.

IV.

And now along the horizon's edge
Mountains of cloud uprose,
Black, as with forests, underneath,
Above, their sharp and jagged teeth
Were white as drifted snows.

Unseen behind them sank the sun,
But flushed each snowy peak
A little while with rosy light,
That faded slowly from the sight,
As blushes from the cheek.

Black grew the sky, all black, all black ;
The clouds were everywhere.
There was a feeling of suspense
In nature, a mysterious sense
Of terror in the air.

And all on board the Valdemar
Was still as still could be ;
Save when the dismal ship-bell tolled,
As ever and anon she rolled,
And lurched into the sea.

The captain up and down the deck
Went striding to and fro ;
Now watched the compass at the wheel,
Now lifted up his hand to feel
Which way the wind might blow.

And now he looked up at the sails,
And now upon the deep ;
In every fibre of his frame
He felt the storm before it came,
He had no thought of sleep.

Eight bells ! and suddenly abaft,
With a great rush of rain,
Making the ocean white with spume,
In darkness like the day of doom,
On came the hurricane.

The lightning flashed from cloud to cloud,
And tore the dark in two ;
A jagged flame, a single jet
Of white fire, like a bayonet,
That pierced his eyeballs through.

Then all around was dark again,
And blacker than before ;
But in that single flash of light
The captain saw a fearful sight,
And thought of the oath he swore.

For right ahead lay the Ship of the Dead,
The ghostly Carmilhan !
Her masts were stripped, her yards were bare,
And on her bowsprit, poised in air,
Sat the Klaboterman.

Her crew of ghosts was all on deck
Or clambering up the shrouds ;
The boatswain's whistle, the captain's hail,
Were like the piping of the gale,
And thunder in the clouds.

And close behind the Carmilhan
There rose up from the sea,
As from a foundered ship of stone,
Three bare and splintered masts alone ;
They were the Chimneys Three !

And onward dashed the Valdemar
And leaped into the dark ;
A denser mist, a colder blast,
A little shudder, and she had passed
Right through the Phantom Bark.

She cleft in twain the shadowy hulk,
But cleft it unaware ;
As when careering to her nest,
The sea-gull severs with her breast
The unresisting air.

Again the lightning flashed ; again
They saw the Carmilhan,
Whole as before in hull and spar ;
But now on board the Valdemar
Stood the Klaboterman.

And they all knew their doom was sealed ;
 They knew that death was near ;
 Some prayed who never prayed before,
 And some they wept, and some they swore,
 And some were mute with fear.

Then suddenly there came a shock,
 And louder than wind or sea
 A cry burst from the crew on deck,
 As she dashed and crashed, a hopeless wreck,
 Upon the Chimneys Three.

The storm and night were passed, the light
 To streak the East began ;
 The cabin-boy, picked up at sea,
 Survived the wreck, and only he,
 To tell of the Carmilhan.

LONGFELLOW.

<i>àn-chor</i> (àng-ker)	<i>tor-mènt</i>	<i>ghóst-ly</i> (góst-)
<i>in-vís-i-ble</i>	<i>hèlms-man</i>	<i>hor-íz-on</i>
<i>màr-in-er</i>	<i>fùr-nace</i>	<i>jàg-ged</i>
<i>chùrch-yärd</i>	<i>chìm-neys</i>	<i>hùr-ri-cane</i>
<i>vic-tór-i-ous</i>	<i>up-lìft-ed</i>	<i>bay'-on-et</i>
<i>ùn-re-sist-ing</i>	<i>ca-reer'-ing</i>	<i>splìnt-ered</i>

kó-bold, spirit, spectre, goblin.
sprite, spirit.

invisible to mortal sight. Vary
 the expression.

jóv-i-al, jolly, joyous, merry.

lout, bumpkin; clumsy, awkward fellow.

be-tide, befall, happen to, come
 upon.

chàrt, map (of any part of the
 sea). Lat. *charta*, "paper."

e-tèrn-i-ty, everlasting time or
 existence; the next world.

pònd-ered, weighed (in his

- mind), thought (seriously) over. Lat. *pondero*, from *pondus*, "weight," from *pendo*, "I weigh."
- fo'-castle* (*fô-kastl*), fore-castle, the part of the ship before the foremast, where the quarters of the sailors are.
- blas-phème*, curse and swear.
- bân*, to issue a proclamation; to warn off, to forbid (under penalties), to interdict.
- dis-dain'*, haughtiness, contempt, scorn.
- dis-mêm-bered*, having the members broken up, or separated; cut in pieces.
- e-mèrge*, rise up out of, spring up. Lat. *e*, "out," and *mergo*, "I plunge."
- sus-pense*, waiting in uncertainty for some result. Lat. *sus* (*sub*), "under," and *pen-sum*, "to hang": "hanging from under," "being hung up."
- mys-tér-i-ous*, involved in mystery; inexplicable, beyond understanding.
- sense*, feeling. Lat. *sensum*, "to feel."
- spume*, foam. Lat. *spuma*, "froth, foam."
- sév-ers*, separates, cleaves, parts. French *sévrer*, Lat. *separare*.
- sur-vived*, outlived, lived after. French *survivre*, from *sur* (Lat. *super*), "over," and *vivre* (Lat. *vivere*), "to live."

KING ALFRED'S WORKS OF PEACE.

FOR several years after 880 there was peace in the land, and for a good many more years still there was much less fighting than there had been before. It was no doubt at this time that Alfred was able to do all those things for the good of his people of which we hear so much. He had now more time than either before or after for making his laws, writing his books, founding his monasteries, and doing all that he did. You may

wonder how he found time to do so much ; but it was by the only way by which anybody can do anything, namely, by never wasting his time, and by having fixed times of the day for everything. Alfred did not, like most other writers of that time, write in Latin, so that hardly anybody but the clergy could read or understand what he wrote. He loved our own tongue, and was especially fond of the Old-English songs, and all that he wrote he wrote in English that all his people might understand. His works were chiefly translations from Latin books ; what we should have valued most of all, his note-book or hand-book, containing his remarks on various matters, is lost. He translated into English the History of Bæda, the History of Orosius, some of the works of Pope Gregory the Great, and the Consolation of Philosophy by Boethius. Perhaps you will ask why he did not rather translate some of the great and famous Greek and Latin writers of earlier times. Now we may be sure that King Alfred did not understand Greek at all ; very few people in those days in the West of Europe knew any Greek, except those who needed to use the language for dealing with the men in the Eastern Empire who still spoke it. Indeed Alfred complains that, when he came to the Crown, very few people, even among the clergy, understood even Latin at all well. And as for Latin books, no doubt Alfred thought that the writings of Christians would be more edifying to his people than those of the old heathens. He chose the History of Orosius, as a general history of the world, and that of Bæda, as a particular history of

England. Boethius was a Roman Consul in the beginning of the sixth century, who was put to death by the great Theodoric, King of the East-Goths, who then ruled over Italy. While he was in prison he wrote the book which King Alfred translated. He seems not to have been a Christian; at least there is not a single Christian expression in his book. But people fancied that he was not only a Christian, but a saint and a martyr, most likely because Theodoric, who put him to death, was not an orthodox Christian but an Arian. Alfred, in translating his books, did not always care to translate them quite exactly, but he often altered and put in things of his own, if he thought he could thus make them more improving. So in translating Boethius he altered a good deal, to make the wise heathen speak like a Christian. So in translating Orosius, where Orosius gives an account of the world, Alfred greatly enlarged the account of all the northern part of Europe, of which Alfred naturally knew much more than Orosius did. There was one Othhere, a Norwegian whale-fisher, whom Alfred employed to visit all the northern countries, and who brought him an account of all that he saw, which Alfred added to the account of Orosius. Besides writing himself, Alfred encouraged learned men, both Englishmen and men from other lands, to help him in writing and teaching his people. Such was Asser the Welshman, a priest from Saint David's, who wrote Alfred's Life, and who became Bishop of Sherborne; such were Grimbold from Flanders and John the Old-Saxon, that is, a Saxon from Germany, as

distinguished from one of Alfred's own West-Saxons in Britain.

Alfred was also very careful in the government of his kingdom, especially in seeing that justice was properly administered. So men said of him in their songs, much as they had long before said of King Edwin in Northumberland, that he hung up golden bracelets by the roadside, and that no man dared to steal them. In his collection of laws, he chiefly put in order the laws of the older Kings, not adding many of his own, because he said that he did not know how those who came after him might like them.

King Alfred was very attentive to religious matters, and gave great alms to the poor and gifts to churches. He also founded two monasteries; one was for nuns, at Shaftesbury in Dorsetshire, of which he made his own daughter Æthelgifu Abbess. The other was for monks at Athelney; you can easily see why he should build it there. He also sent several embassies to Rome, where he got Pope Marinus to grant certain privileges to the English School at Rome; the Pope also sent him what was thought to be a piece of the wood of the True Cross, that on which our Lord Jesus Christ died. He also sent an embassy to Jerusalem, and had letters from Abel the Patriarch there. And what seems stranger than all, he sent an embassy all the way to India, with alms for the Christians there, called the Christians of Saint Thomas and Saint Bartholomew.

Lastly, there seems some reason to think that the Chronicle began to be put together in its present shape

in Alfred's time, and that it was regularly gone on with afterwards, so that from the time of Alfred onwards we have a history which was regularly written down as things happened.

All these things happened mainly in the middle years of the reign of Alfred, when there was so much less fighting than there was before and after, and when some years seem to have been quite peaceable.

E. A. FREEMAN.

com-plains'

ex-près-sion

en-lārged

em-ployed'

en-coûr-aged

dis-tin-guished

gov-ern-ment

brāce-lets

col-lēc-tion

Al-fred, King of the West Saxons, reigned 871-901. He was born at Wantage in Berkshire, in 849.

mōn-as-ter-ies, houses for monks, abbeys, convents.

trans-lāte, to render, or turn, from one language into another. Lat. *trans*, "across, over," and *latum*, "to bring."

Bæda, commonly called "the Venerable" Bede (from his learning, piety, and talents), was a monk of Jarrow monastery, and probably the greatest scholar of his age (A.D. 673-735).

Orósius, a Spanish historian of the beginning of the fifth century. He wrote in Latin a history of the world down

to 417 A.D., which was a favourite text-book in the Middle Ages.

vāl-ued, prized.

éd-i-fy-ing, instructive.

mār-tyr, lit., a witness; one that by his death bears witness to his religion; one that is put to death for his religious beliefs.

ór-tho-dox, of the right opinions; holding the true doctrines. Greek *orthos*, "right," and *doxa*, "opinion."

A'-ri-an, follower of Arius, a native of Libya, who lived in last half of 2nd and beginning of 3rd century. Arius taught that the Son was not co-equal and co-eternal with the Father, but

only the first and highest of created beings.

abbess, a lady placed at the head of a religious house, or nunnery. What is the corresponding masculine word?

em-bas-sy, a public message sent by one sovereign to another; also the persons sent (the ambassador and his suite).

priv-i-lege, special advantage.



AFTERNOON IN FEBRUARY.

THE day is ending,
 The night is descending;
 The marsh is frozen,
 The river dead.

Through clouds like ashes,
The red sun flashes
On village windows
That glimmer red.

The snow recommences,
The buried fences
Mark no longer
The road o'er the plain ;
While through the meadows,
Like funeral shadows,
Slowly passes
A funeral train.

The bell is pealing,
And every feeling
Within me responds
To the dismal knell.
Shadows are trailing,
My heart is bewailing
And tolling within
Like a funeral bell.

LONGFELLOW.

MISSOURI LEAD MINES.

THE village of Granby, in Missouri, stands in the largest and richest lead region of the United States.

All mining districts have a mysterious family resemblance; and this instantly reminded me of the Rocky Mountain gold-diggings, though it was difficult to tell what features they had in common. Here on a rough woody tract of six hundred and forty acres, three thousand people were living, two-thirds of them working underground. The rude village was dotted with log buildings, and like a prairie-dog town, with mounds of red loam, gravel, and stone thrown up from hundreds of shafts. From a valley near by rose the low heavy chimneys of smelting-furnaces.

The lead is found from ten to seventy-five feet below the surface. From most shafts the ore is raised in buckets by the common windlass and crank; but at a few, horse-power is used.

Arrayed in a miner's old and well-worn suit of corduroys, I stepped into the descending bucket, and clung to the rope above. The owner of the mine shared the conveyance with me, using one hand and one foot to ward off the rough walls. At the depth of seventy feet we reached the bottom of the shaft, which was blasted through lime and flint rocks.

Then my conductor, bearing a tallow candle, guided me through the labyrinth of passages, at times not more than two feet high, until we reached the miners. Some were quarrying out the metal; others blasting it from "pockets" in the rock. In one place they were lying flat upon their backs digging it with picks from the roof passage a foot high: in another they were perched up in a gallery, breaking off the blocks

and rolling them down. Then the ore was carried by cars upon a wooden railway to the bottom of the shafts, when it was drawn up into daylight, and hauled to the furnaces.



A few feet above the floor was a stratum of flint which made a secure roof; where the excavations did not extend up to it, props were set to keep the earth from falling in. The ore is found in seams from six

inches to a foot thick. Sometimes there are huge masses nearly pure; again it is mingled with flint rock; and again the vein seems to run out, but re-appears in unexpected directions. One pure block weighing two thousand pounds was taken out. The ore averages eighty per cent. of lead.

Here, as everywhere, mining is a lottery. Workmen sometimes obtained no reward for many days, and again cleared a hundred and fifty dollars per week. Promising claims proved utterly worthless, and others which were believed exhausted afterwards yielded richly. The dark and unwholesome mines were half full of water, and often dangerous from foul air. Yet labourers were glad to work in them at one dollar and twenty-five cents per day, boarding themselves.

My conductor, a miner from childhood, had witnessed many fatal accidents, and declared it "a slave's life"; but was unable to content himself in any other pursuit.

The ore is reduced in "Scotch ovens" by a heat much less than that required in smelting iron. It is broken into fragments no larger than walnuts, then mingled with lime, and melted upon a fire of charcoal and dry wood. In a stream bright and shining as silver, it falls into the basins. Thence it is ladled into moulds where it cools into marketable "pigs" of eighty pounds. This process extracts sixty-six per cent. of the lead. The refuse matter is then subjected to much greater heat, by which ten per cent. more is obtained. The smelting is very trying to health. Smelters received

ten dollars per week, labouring five hours a day. The annual product of the region is now two and a half million of pounds, and the deposits in that section are believed to underlie an immense tract. Lead mines are less liable to "run out" than silver or gold; some in the Hartz Mountains of Germany have yielded steadily and richly for five hundred years.

A. D. RICHARDSON.

mys-tér-i-ous

còrd-u-roy

con-vey'-ance

quar'-ry-ing

prai'-rie

chòm-neys

wìnd-lass

gàll-er-y

àv-er-age

ex-haust'-ed

un-wholé'-some

fea'-tures

re-sém-blance, likeness.

re-mind-ed, put in mind, brought back to (my) mind.

ar-rayed', dressed up, fitted out.

lâb-y-rinth, a place full of windings, very difficult to find one's way through rightly.

ex-cav-â-tion, digging, hollowing out. Lat. *ex*, "out," and *cavus*, "hollow."

pur-suit', following after; what one follows after, as a business.

frâg-ments, pieces, or bits, broken from a mass. Lat. *frag*-, "to break."

mâr-ket-a-ble, fit to go to market, or to be sold.

ex-trâct, to draw out. Lat. *ex*, "out," and *tractum*, "to draw."

Exercise.—Express in other ways, and at length: (1) "family resemblance"; (2) "Rocky Mountain gold diggings."



THE SKATER'S SONG.

AWAY! away! our fires stream bright
Along the frozen river;
And their arrowy sparkles of frosty light
On the forest branches quiver.
Away! away! for the stars are forth,
And on the pure snows of the valley,
In a giddy trance, the moonbeams dance—
Come, let us our comrades rally!

Away! away! o'er the sheeted ice,
 Away, away we go;
 On our steel-bound feet we move as fleet
 As deer o'er the Lapland snow.
 What though the sharp north winds are out,
 The skater heeds them not;
 Midst the laugh and shout of the jocund rout,
 Grey winter is forgot.

'Tis a pleasant sight, the joyous throng
 In the light of the reddening flame,
 While, with many a wheel on the ringing steel,
 They wage their riotous game;
 And though the night-air cutteth keen,
 And the white moon shineth coldly,
 Their homes, I ween, on the hills have been—
 They should breast the strong blast boldly.

Let others choose more gentle sports
 By the side of the winter hearth;
 Or 'neath the lamps of the festal hall
 Seek for their share of mirth;
 But as for me, away! away!

Where the merry skaters be—
 Where the fresh wind blows and the smooth ice glows,
 There is the place for me! EPHRAIM PEABODY.

dr-row-y

quív-er

còm-rades

rl-ot-ous

moon'-beams

joy'-ous

jòc-und, joyous, gay, merry.
ween, think, believe.

fèst-al, joyous, mirthful. "The
festal hall," the hall *where*
people feast.

THE DISCOVERER OF THE NORTH CAPE.

OTHER, the old sea-captain,
Who dwelt in Helgoland,
To King Alfred, the Lover of Truth,
Brought a snow-white walrus-tooth,
Which he held in his brown right hand.

His figure was tall and stately,
Like a boy's his eye appeared ;
His hair was yellow as hay,
But threads of a silvery grey
Gleamed in his tawny beard.

Hearty and hale was Other,
His cheek had the colour of oak ;
With a kind of laugh in his speech,
Like the sea-tide on a beach,
As unto the king he spoke.

And Alfred, King of the Saxons,
Had a book upon his knees,
And wrote down the wondrous tale
Of him who was first to sail
Into the Arctic seas.

"So far I live to the northward,
No man lives north of me ;
To the east are wild mountain-chains,
And beyond them meres and plains ;
To the westward all is sea.

“ So far I live to the northward,
From the harbour of Skeringes-hale,
If you only sailed by day,
With a fair wind all the way,
More than a month would you sail.

“ I own six hundred reindeer,
With sheep and swine beside;
I have tribute from the Finns,
Whalebone and reindeer-skins,
And ropes of walrus-hide.

“ I ploughed the land with horses,
But my heart was ill at ease,
For the old seafaring men
Came to me now and then,
With their sagas of the seas;—

“ Of Iceland and of Greenland,
And the stormy Hebrides,
And the undiscovered deep;—
I could not eat nor sleep
For thinking of those seas.

“ To the northward stretched the desert,
How far I fain would know;
So at last I sallied forth,
And three days sailed due north,
As far as the whale-ships go.

"To the west of me was the ocean,
To the right the desolate shore,
But I did not slacken sail
For the walrus or the whale,
Till after three days more.

"The days grew longer and longer,
Till they became as one,
And southward through the haze
I saw the sullen blaze
Of the red midnight sun.

"And then uprose before me,
Upon the water's edge,
The huge and haggard shape
Of that unknown North Cape,
Whose form is like a wedge.

"The sea was rough and stormy,
The tempest howled and wailed,
And the sea-fog, like a ghost,
Haunted that dreary coast,
But onward still I sailed.

"Four days I steered to eastward,
Four days without a night:
Round in a fiery ring
Went the great sun, O King,
With red and lurid light."



Here Alfred, King of the Saxons,
Ceased writing for a while ;
And raised his eyes from his book,
With a strange and puzzled look,
And an incredulous smile.

But Othere, the old sea-captain,
He neither paused nor stirred,
Till the King listened, and then
Once more took up his pen,
And wrote down every word.

"And now the land," said Othere,
 "Bent southward suddenly,
And I followed the curving shore,
And ever southward bore
 Into a nameless sea.

"And there we hunted the walrus,
 The narwhale, and the seal;
Ha! 'twas a noble game!
And like the lightning's flame
 Flew our harpoons of steel.

"There were six of us altogether,
 Norsemen of Helgoland;
In two days and no more
We killed of them threescore,
 And dragged them to the strand!"

Here Alfred, the Truth-Teller,
 Suddenly closed his book,
And lifted his blue eyes,
With doubt and strange surmise
 Depicted in their look.

And Othere, the old sea-captain,
 Stared at him wild and weird,
Then smiled, till his shining teeth
Gleamed white from underneath
 His tawny, quivering beard.

And to the King of the Saxons,
 In witness of the truth,
 Raising his noble head,
 He stretched his brown hand, and said,
 "Behold this walrus-tooth !"

LONGFELLOW.

{ sailed	{ rough (rùf)	{ haunt (hōnt)
{ sallied	{ plough (plou)	{ pause (pōz)
	ghost (góst)	tawn-y (tōn-y)
	knee (né)	laugh (lāf)
fìg-ure	ap-peared'	won'-drous
státe-ly	hàg-gard	un-dis-cov'-ered

Hèl-go-land, Halgoland, in Norway; not Heligoland. From *Halogi* ("High-Flame"), from the ancient worship of fire here.

Wal-rus (*wōl-rus*), the sea-horse, or morse, found in the northern seas. It is hunted for its oil and its tusks. "Wal" is the same as "whale," and "rus" is the Old-English *hros* (German *ross*), our "horse."

Arc-tic, strictly, "of, or pertaining to, the Bear"; northern. Greek *arktos*, "a bear"; hence a cluster of stars near the Pole star is named "The Bear," and the regions round about the North Pole are called the Arctic regions—the

regions of the Bear (or the north).

mere, lake, pool; as in "Windermere."—"Mere," as in "mere folly," is a different word; "mere folly" is "pure, unmixed folly," "folly and nothing else." "A mere child," is "a child and nothing better," not stronger, larger, more experienced.

tri-bute, payment made to a stronger party by a weaker. *sea-fār-ing*, sea-going. Compare "wayfaring, thoroughfare." "To fare" is "to go." "How fares it with you?" = "How goes it with you?"

sá-ga, story, tale, of the great deeds of northern heroes.

How far——. Fill in the words omitted. "I fain would know *how far*——."

sàl-lied (-*lied*), *leapt*, rushed.

due north, right, straight, exactly north. "Due," owing, fitting, proper, exact.

dè-sol-ate, lonely, barren; where no men live, and no plants grow. Strictly, "made all *alone*"; Lat. *solus*, "alone."

lur-id, pale, gloomy.

in-créd-ul-ous, unbelieving; showing that he did not

think the story true. Lat. *in*, "not," and *credo*, "I believe."

nār-whale, sea-unicorn, whale with single long tusk. Strictly, the *pallid* or *corpse-like* whale; Icelandic *nar*, "a corpse."

sur-mise, suspicion, supposition.

de-pict-ed, painted. Lat. *de*, "down," and *pictum*, "to paint."

weird, witch-like, unearthly.

THE ESQUIMAUX.

1. THEIR PERSONS AND THEIR DRESS.

THE tribe of Esquimaux, whom we found assembled at Winter Island and Igloolik, are, in stature, much below Europeans in general. Of twenty individuals of each sex measured at Igloolik, the range was: men, from 5 feet 10 inches to 4 feet 11 inches,—the average height, 5 ft. 5½ in.; women, from 5 ft. 3½ in. to 4 ft. 8¾ in.,—the average height, 5 ft. 0½ in. The women, however, generally appear shorter than they really are, both from the unwieldy nature of their clothes, and from a habit, which they early acquire, of stooping considerably forward in order to balance the weight of the child they carry in their hood.

In their figure they are rather well-formed than otherwise. Their knees are indeed rather large in proportion, but their legs are straight, and the hands and feet, in both sexes, remarkably small. The younger individuals were all plump, but none of them corpulent ; the women inclined the most to this last extreme, and



their flesh was, even in the youngest individuals, quite loose and without firmness.

Their faces are generally round and full, eyes small and black, nose also small and sunk far in between the cheek bones, but not much flattened. Their teeth are short, thick, and close, generally regular, and in the

young persons almost always white. The elderly women were still well-furnished in this way, though their teeth were usually a good deal worn down, probably by the habit of chewing the sealskins for making boots.

In the young of both sexes the complexion is clear and transparent, and the skin smooth. The colour of the latter, when divested of oil and dirt, is scarcely a shade darker than that of a deep brunette, so that the blood is plainly perceptible when it mounts into the cheeks. In the old folks, whose faces were much wrinkled, the skin appears of a much more dingy hue, the dirt being less easily, and therefore less frequently, dislodged from them.

By whatever peculiarities, however, they may in general be distinguished, they are by no means an ill-looking people; and there were among them grown-up persons of each sex, who, when divested of their skin-dresses, their tattooing, and, above all, of their dirt, might have been considered pleasing-looking, if not handsome, people in any town in Europe. This remark applies more generally to the children also; several of whom had complexions nearly as fair as that of Europeans, and whose little bright black eyes gave a fine expression to their countenances.

The hair, both of males and females, is black, glossy, and straight. The men usually wear it rather long, and allow it to hang about their heads in a loose and slovenly manner. The women pride themselves extremely on the length and thickness of their hair; and

it was not without reluctance on their part, and the same on that of their husbands, that they were induced to dispose of any of it. Some of the women's hair was tolerably fine, but would not, in this respect, bear a comparison with that of an Englishwoman. In both sexes it is full of vermin. The women have a comb, which however seems more intended for ornament than use, as we seldom or never observed them comb their hair. When a woman's husband is ill, she wears her hair loose, and cuts it off as a sign of mourning if he dies: a custom agreeable with that of the Greenlanders. The men wear the hair on the upper lip and chin from an inch to an inch and a half in length, and some were distinguished by a little tuft between the chin and lower lip.

In winter every individual when in the open air wears two jackets, of which the outer one has the hair outside and the inner one next the body. Immediately on entering the hut the men take off their outer jacket, beat the snow from it, and lay it by.

The upper garment of the females, besides being cut according to a regular and uniform pattern, and sewed with extreme neatness, which is the case with all the dresses of these people, has also the flaps ornamented in a very becoming manner by a neat border of deer-skin so arranged as to display alternate breadths of white and dark fur. This is, moreover, usually beautified by a handsome fringe, consisting of innumerable long narrow threads of leather hanging down from it. This ornament is not uncommon also in the outer

jackets of the men. When seal-hunting they fasten up the tails of their jackets with a button behind.

Their breeches, of which in winter they also wear two pairs, and similarly disposed as to the fur, reach below the knee, and fasten with a string drawn tight round the waist. Though these have little or no waistband, and do not come very high, the depth of the jackets, which considerably overlap them, serves very effectually to complete the covering of the body.

Their legs and feet are so well clothed that no degree of cold can well affect them. When a man goes on a sealing excursion, he first puts on a pair of deerskin boots with the hair inside, and reaching to the knee, where they tie. Over these come a pair of shoes of the same material; next a pair of dressed sealskin boots, perfectly water-tight; and, over all, a corresponding pair of shoes, tying round the instep. These last are made just like the moccasin of a North American Indian, being neatly crimped at the toes, and having several serpentine pieces of hide sewn across the sole to prevent wearing. The water-tight boots and shoes are made of the skin of the small seal, except the soles, which consist of the skin of the large seal; this last is also used for their fishing-lines. When the men are not prepared to encounter wet they wear an outer boot of deerskin, with the hair outside.

The inner boot of the women, unlike that of the men, is loose round the leg, coming as high as the knee-joint behind, and in front carried up by a long-pointed flap nearly to the waist, and there fastened to

the breeches. The upper boot, with the hair as usual outside, corresponds with the other in shape, except that it is much more full, especially on the outer side, where it bulges out so preposterously as to give the women the most awkward bow-legged appearance imaginable. This superfluity of boot has probably originated in the custom still common among the native women of Labrador, of carrying their children in them. We were told that these women sometimes put their children there to sleep, but the custom must be rare among them, as we never saw it practised. These boots, however, form their principal pockets, and pretty capacious ones they are. Here, also, as in jackets, considerable taste is displayed in the selection of different parts of the deerskin, alternate strips of dark and white being placed up and down the sides and front by way of ornament. The women also wear a moccasin over all in the winter time.

To judge by the eagerness with which the women received our beads, especially small white ones, as well as any other article of that kind, we might suppose them very fond of personal ornament. Yet of all that they obtained from us in this way at Winter Island, scarcely anything ever made its appearance again during our stay there, except a ring or two on the finger, and some bracelets of beads round the wrist; the latter of these was probably considered as a charm of some kind or other. We found among them, at the time of our first intercourse, a number of black and white beads, disposed alternately on a string of sinew and worn in

this manner. They would also sometimes hang a small bunch of these, or a button or two, in front of their jackets and hair; and many of them, in the course of the second winter, covered the whole front of their jackets with the beads they received from us.

Among their personal ornaments must be reckoned that mode of marking the body called tattooing, which, of the customs not essential to the comfort or happiness of mankind, is perhaps the most extensively practised throughout the world. Among these people it seems to be an ornament of indispensable importance to the women, not one of them being without it. The operation is performed about the age of ten, or sometimes earlier, and has nothing to do with marriage, except that, being considered in the light of a personal charm, it may serve to recommend them as wives. The parts of the body thus marked are their faces, arms, hands, thighs, and in some few women the breasts, but never the feet, as in Greenland. The operation is very expeditiously managed by passing a needle and thread, the latter covered with lampblack and oil, under the epidermis, according to a pattern previously marked out upon the skin. Several stitches being thus taken at once, the thumb is pressed upon the part while the thread is drawn through, by which means the colouring matter is retained, and a permanent dye of a blue tinge imparted to the skin. A woman expert at this business will perform it very quickly and with great regularity, but seldom without drawing blood in many places, and occasioning some inflammation. Where so large a

portion of the surface of the body is to be covered, it must become a painful as well as tedious process, especially as for want of needles, they often use a strip of whale-bone as a substitute. For those parts where a needle cannot conveniently be passed under the skin, they use the method by puncture, which is common in other countries, and by which our seamen frequently mark their hands and arms.

<i>Ès-qui-maux</i> (<i>Ès-ki-mö</i>)	<i>mèas-üréd</i>	<i>wrinkled</i>
<i>as-sèm-bled</i>	<i>àv-er-age</i>	<i>slòv-en-ly</i>
<i>in-di-vìd-ü-als</i>	<i>com-plèx-ion</i>	<i>en-coun'-ter</i>
<i>tòl-er-a-bly</i>	<i>trans-pár-ent</i>	<i>se-lèc-tion</i>
<i>com-pàr-i-sons</i>	<i>dis-lòdged</i>	<i>màr-riage</i>
<i>pre-pòst-er-ous-ly</i>	<i>beau'-ti-fied</i>	<i>ex-cür-sion</i>

stát-ure, standing; height. Lat. *statura*, from *statum*, "to stand."

un-wield'-y, not readily wielded, or managed; clumsy, awkward.

còrp-u-lent, having a large body; stout, fat. Lat. *corpus*, "a body."

di-vest-ed, stript, deprived of. Lat. *dí*, "asunder, apart, off;" and *vestio*, "I clothe;" lit. "to take off the clothing."

brun-ette (*brün-èt*), woman with brown or dark complexion. French diminutive of *brun*, "brown."

per-cèp-ti-ble, able to be per-

ceived or felt,—here to be seen.

dis-lòdged, removed from its lodging, or lodgment,—from the place where it has lodged or settled. Observe the force of "dis."

re-luct-ance, unwillingness. Lat. *re*, "back," and *lucto*, "I struggle;" lit. "struggling against."

in-duced, led on to, prevailed upon. Lat. *in*, "in, to," and *duco*, "I lead."

ef-fèct-ü-al-ly, with effect, thoroughly; in such a manner as to effect or accomplish the action.

cor-re-spond-ing, answering to, suiting, fitting. Lat. *cor* (*con*), "together," and *re-spondeo*, "I reply"—from *re*, "back," and *spondeo*, "I promise."

môc-cas-in, shoe of soft leather (deerskin, &c.), without sole.

sêr-pent-ine, like a serpent. In what respect?

su-per-flu-i-ty, excess, more than enough. Lat. *super*, "over," and *fluo*, "I flow."

cap-â-cious, holding a great deal, roomy, large. Lat. *capax*, from *capio*, "I hold."

or-i-gin-ate, take origin, arise.

in-dis-pens-a-ble, that cannot be dispensed with; or done without; necessary.

ex-ped-i-tious-ly, quickly, speedily, promptly.

ep-i-derm-is, the outer *skin*. Lit. the skin that lies *upon* the true *skin*; Greek, from *epi*, "upon," and *derma*, "skin."

pêr-man-ent, constant, remaining always. Lat. *per*, "through, thoroughly," and *maneo*, "I stay, remain."

punc-ture, pricking. Lat. *punctum*, "to prick."

2. ESQUIMAUX HUTS AND HOUSEHOLDS.

IN their winter habitations the only materials employed are snow and ice, the latter being made use of for the windows alone. The work is commenced by cutting from a drift of hard and compact snow a number of oblong slabs six or seven inches thick and about two feet in length, and laying them edgeways on a level spot, also covered with snow, in a circular form, and of a diameter from eight to fifteen feet, proportioned to the number of occupants the hut is to contain. Upon this, as a foundation, is laid a second tier of the same kind, but with the pieces inclining a little inward, and made to fit closely to the lower slabs and to each other, by running a knife adroitly along the upper parts and sides.

The top of this tier is now prepared for the reception of a third by squaring it off smoothly with a knife, all which is dexterously performed by one man standing within the circle and receiving the blocks of snow from those employed in cutting them without. When the wall has attained a height of four or five feet it leans so much inward as to appear as if about to tumble every moment, but the workmen still fearlessly lay their blocks of snow upon it until it is too high any longer to furnish the materials to the builder in this manner. Of this he gives notice by cutting a hole close to the ground in that part where the door is intended to be, which is near the south side, and through this the snow is now passed. Thus they continue till they have brought the sides nearly to meet in a perfect and well-constructed dome, sometimes nine or ten feet high in the centre; and this they take considerable care in finishing by fitting the last block, or *keystone*, very nicely in the centre, dropping it into its place from the outside, though it is still done by the man within. The people outside are in the meantime occupied in throwing up snow with the snow shovel, and in stuffing in little wedges of snow where holes have been accidentally left.

The builder next proceeds to let himself out by enlarging the proposed doorway into the form of a Gothic arch, three feet high and two feet and a half wide at the bottom, communicating with which they construct two passages, each from ten to twelve feet long and from four to five feet in height, the lowest being that

next the hut. The roofs of these passages are sometimes arched, but more generally made flat by slabs laid on horizontally. In first digging the snow for building the hut, they take it principally from the part where the passages are to be made, which purposely brings the floor of the latter considerably lower than that of the hut, but in no part do they dig till the bare ground appears.

The work just described completes the walls of a hut, if a single apartment only be required; but if, on account of relationship, or from any other cause, several families are to reside under one roof, the passages are made common to all, and the first apartment (in that case made smaller) forms a kind of ante-chamber, from which you go through an arched doorway five feet high into the inhabited apartments. When there are three of these, which is generally the case, the whole building, with its adjacent passages, forms a tolerably regular cross.

For the admission of light into the huts a round hole is cut on one side of the roof of each apartment, and a circular plate of ice, three or four inches thick and two feet in diameter, let into it. The light is soft and pleasant, like that transmitted through ground glass, and it is quite sufficient for every purpose. When, after some time, these edifices become surrounded by drift, it is only by the windows that they could be recognized as human habitations. It may, perhaps, then be imagined how singular is their external appearance at night, when they discover themselves

only by a circular disk of light transmitted through the windows from the lamps within.

The next thing to be done is to raise a bank of snow, two and a half feet high, all round the interior of each apartment, except on the side next the door. This bank, which is neatly squared off, forms their beds and fireplace, the former occupying the sides and the latter the end opposite the door. The passage left open up to the fireplace is between three and four feet wide. The beds are arranged by first covering the snow with a quantity of small stones, over which are laid their paddles, tentpoles, and some blades of whalebone; above these they place a number of little pieces of network, made of thin slips of whalebone, and lastly a quantity of twigs of birch and of the *andromeda tetragona*. Their deerskins, which are very numerous, can now be spread without risk of their touching the snow; and such a bed is capable of affording not merely comfort, but luxurious repose, in spite of the rigour of the climate. The skins thus used as blankets are made of a large size, and bordered, like some of the jackets, with a fringe of long narrow slips of leather.

The fire belonging to each family consists of a single lamp, or shallow vessel of *lapis ollaris*, its form being the lesser segment of a circle. The wick, composed of dry moss rubbed between the hands till it is quite inflammable, is disposed along the edge of the lamp on the straight side, and a greater or smaller quantity lighted according to the heat required or the fuel that can be afforded. When the whole length of this, which is

sometimes above eighteen inches, is kindled, it affords a most brilliant and beautiful light, without any perceptible smoke or any offensive smell. The lamp is made to supply itself with oil by suspending a long thin slice of whale, seal, or sea-horse blubber near the flame, the warmth of which causes the oil to drop into the vessel until the whole is extracted. Immediately over the lamp is fixed a rude and rickety framework of wood from which their pots are suspended, and serving also to sustain a large hoop of bone, having a net stretched tight within it. This contrivance is intended for the reception of any wet things, and is usually loaded with boots, shoes, and mittens.

The fireplace, just described as situated at the upper end of the apartment, has always two lamps facing different ways, one for each family occupying the corresponding bedplace. There is frequently, also, a smaller and less pretending establishment on the same model—lamp, pot, net, and all—in one of the corners next the door, for one apartment sometimes contains three families, which are always closely related; and no married woman, or even a widow without children, is without her separate fireplace.

With all the lamps lighted and the hut full of people and dogs, a thermometer placed on the net over the fire indicated a temperature of 38° ; when removed two or three feet from this situation, it fell to 31° ; and placed close to the wall, stood at 23° , the temperature of the open air at the time being 25° below zero. A greater degree of warmth than this produces extreme incon-

venience by the droppings from the roof. This they endeavour to obviate by applying a little piece of snow to the place from which a drop proceeds, and this, adhering, is for a short time an effectual remedy; but for several weeks in spring, when the weather is too warm for these edifices, and still too cold for tents, they suffer much on this account.

The most important, perhaps, of the domestic utensils next to the lamp already described, are the stone pots for cooking. These are hollowed out of solid *lapis ollaris*, of an oblong form, wider at the top than at the bottom, all made in similar proportion, though of various sizes, corresponding with the dimensions of the lamp which burns under it. The pot is suspended by a line of sinew at each end to the framework over the fire, and thus becomes so black on every side that the original colour of the stone is in no part discernible. Many of them were cracked quite across in several places, and mended by sewing with sinew or rivets of copper, iron, or lead, so as, with the assistance of a lashing and a due proportion of dirt, to render them quite watertight.

Besides the stone pots, they have circular and oval vessels of whalebone, of various sizes. They have also a number of smaller vessels of skin sewed neatly together; and a large basket of the same material, resembling a common sieve in shape, but with the bottom close and tight, is to be seen in every apartment. Under every lamp stands a sort of "save-all," consisting of a small skin basket for catching the oil that falls over. Almost every family was in possession of a wooden tray very

much resembling those used to carry butcher's meat in England, and nearly the same dimensions, which we understood them to have procured by way of Noowook. They had a number of bowls or cups made out of the thick root of the horn of the musk-ox. Of the smaller part of the same horn they also form a convenient drinking-cup, sometimes turning it up artificially about one-third from the point, so as to be almost parallel to the other part, and cutting it full of small notches as a convenience in grasping it.

Besides the ivory knives made out of the walrus's tusk, the men were well supplied with a much more serviceable kind made of iron. The form of this knife is very peculiar, being seven inches long, two and a quarter broad, quite straight and flat, pointed at one end, and ground equally sharp at both edges; this is firmly secured into a handle of bone or wood about a foot long, by two or three iron rivets, and has all the appearance of a most destructive spear-head, but is nevertheless put to no other purpose than that of a very useful knife, which the men are scarcely ever without, especially on their sealing excursions. For these, and several knives of European form, they are probably indebted to an indirect communication with our factories in Hudson's Bay. The same may be observed of the best of their women's knives, on one of which, of a larger size than usual, were the names of "Wild and Sorby." When of their own manufacture, the only iron part was a little narrow slip let into the bone and secured by rivets.

Of the horn of the musk-ox they make also very good spoons, much like ours in shape; and I must not omit to mention their marrow spoons, made out of long narrow, hollowed pieces of bone, of which every housewife has a bunch of half-a-dozen or more tied together, and generally attached to her needle-case.

For the purpose of obtaining fire, the Esquimaux use two lumps of common iron pyrites, from which sparks are struck into a little leathern case containing moss well dried and rubbed between the hands. If this tinder does not readily catch, a small quantity of the white floss of the seed of the ground-willow is laid above the moss. As soon as a spark has caught, it is gently blown till the fire has spread an inch around, when, the pointed end of a piece of oiled wick being applied, it soon bursts into a flame, the whole process having occupied perhaps two or three minutes.

In enumerating the articles of their food, we might, perhaps, give a list of every animal inhabiting the regions, as they certainly will, at times, eat any one of them. Their principal dependence, however, is on the reindeer, musk-ox (in the parts where this animal is found), whale, walrus, the large and small seal, and two sorts of salmon are taken by hooks in freshwater lakes, the other by spearing in the shoal water of certain inlets of the sea. Of all these animals they can only procure in the winter the walrus and small seal upon this part of the coast; and these, at times, in scarcely sufficient quantity for their subsistence.

They certainly, in general, prefer eating their meat

cooked ; and, while they have fuel, they usually boil it ; but this is a luxury, and not a necessary to them. Oil as the nature of their principal food is, yet they commonly take an equal proportion of lean to the fat, and, unless very hungry, do not eat it otherwise. Oil they seldom or never use in any way as a part of their general diet ; and even our butter, of which they were fond, they would not eat without a due quantity of bread. They do not like salt meat as well as fresh, and never use salt themselves ; but ship's pork, or even a red herring, did not come amiss to them. Of pea-soup they would eat as much as the sailors could afford to give them ; and that word was the only one, with the exception of our names, which many of them ever learned in English. Among their own luxuries must be mentioned a rich soup, made of blood, gravy, and water, and eaten quite hot.

Their only drink is water ; and of this, when they can procure it, they swallow an inconceivable quantity ; so that one of the principal occupations of the women during the winter is the thawing of snow in the stone pots for this purpose. They cut it into thin slices, and are careful to have it clean, on which account they will bring it from a distance of fifty yards from the huts. They have an extreme dislike to drinking water much above the temperature of 32°. In eating their meals, the mistress of the family, having previously cooked the meat, takes a large lump out of the pot with her fingers, and hands it to her husband, who, placing a part of it between his teeth, cuts it off with a large

knife in that position, and then passes the knife and meat together to his next neighbour. In cutting off a mouthful of meat, the knife passes so close to their lips, that nothing but constant habit could ensure them from the danger of the most terrible gashes; and it would make an English mother shudder to see the manner in which children five or six years old are at all times freely trusted with a knife to be used in this way.

SIR W. E. PARRY.

<i>èd-ge-ways</i>	<i>sur-round'-ed</i>	<i>e-stàb-lish-ment</i>
<i>dî-à-me-ter</i>	<i>lux-u'-ri-ous</i>	<i>dis-cèrn-i-ble</i>
<i>pro-pór-tioned</i>	<i>per-cèp-ti-ble</i>	<i>in-con-vén-i-ence</i>
<i>ac-cid-ènt-al-ly</i>	<i>sus-pènd-ing</i>	<i>ef-fèct-ù-al</i>
<i>com-mun'-i-cât-ing</i>	<i>con-triv-ance</i>	<i>dom-èst-ic</i>
<i>rè-lâ-tion-ship</i>	<i>cor-re-spònd-ing</i>	<i>sèr-vice-a-ble</i>

com-pàct, firmly pressed together. Distinguish "*compact*" (a bargain).

tier (*tér*), row, rank; especially when rising one above another.

a-droit-ly, clearly, skilfully. Lit. so as to go *straight* to the mark; French *à* (Lat. *ad*), "to," and *droit* (Lat. *directus*), "straight, right."

dèx-ter-ous-ly, adroitly, cleverly. Lat. *dexter*, "the right hand;" lit. "as with the right hand."

hor-iz-ont-al-ly, in a level posi-

tion; so as to be in line with the horizon.

ad-já-cent, neighbouring, lying near. Lat. *ad*, "to," and *jaceo*, "I lie."

trans-mit, send through. Lat. *trans*, "through," and *mitto*, "I send."

éd-i-fice, building. Lat. *ædificium*, from *ædifico*, "I build," from *ædes*, "a building," and *facio*, "I make."

rè-cog-nized, known again.

lapis olláris. Lat. *lapis*, "stone," and *olláris*, "belonging to jars or pots" (Lat. *olla*),

sèg-ment, part cut off (by a line drawn right across). Lat. *sectum*, "to cut."

in-flàm-ma-ble, easy to set in flames, ready to take fire. Lat. *in*, "into," and *flamma*, "flame."

ther-mò-me-ter, *heat-measure*, an instrument that measures heat. Lat. *thermos*, "hot, warm," and *metron*, "a measure."

tèmp-er-a-ture, degree, or amount, of heat or cold. Lat. *tempero*, "I regulate."

zé-ro, nothing, cipher; the point where the graduation of an instrument begins from. *òb-vi-ate*, meet; find a remedy

for (a difficulty). Lat. *ob-viam* "in the way (*via*), towards."

ad-hér-ing, sticking to. Lat. *ad*, "to," and *hæreo*, "I stick, or cling."

ût-èn-sils, vessels, &c., for various uses. Lat. *utor*, "I use."

di-mèn-sion, size, measure.

pyr-i-tes, *fire-stone*; a compound of sulphur with other metals—iron, copper, &c.; so called because it strikes *fire* (Greek, *pyr*) with steel.

sub-sist-ence, livelihood, living. *in-con-céiv-a-ble*, beyond conception; that cannot be conceived or imagined.

SIR JOHN FRANKLIN.

"The ice was here, the ice was there,
The ice was all around."

COLERIDGE.

"Oh, whither sail you, Sir John Franklin?"

Cried a whaler in Baffin's Bay.

"To know if between the land and the pole,
I may find a broad sea-way."

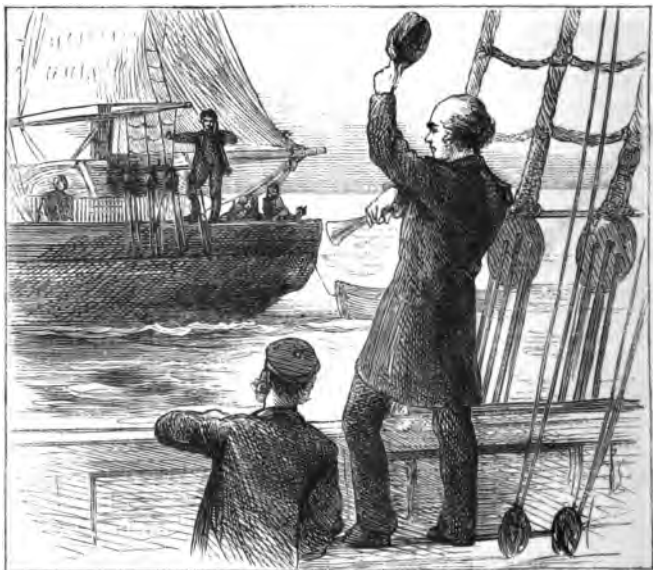
"I charge you back, Sir John Franklin,

As you would live and thrive;

For between the land and the frozen pole

No man may sail alive."

But lightly laughed the stout Sir John,
And spoke unto his men :
"Half England is wrong if he is right ;
Bear off to westward again."



"Oh, whither sail you, brave Englishman?"
Cried the little Esquimaux.
"Between your land and the polar star
May goodly vessels go."

"Come down, if you would journey there,"
The little Indian said ;
"And change your cloth for fur clothing,
Your vessel for a sled."

But lightly laughed the stout Sir John,
And the crew laughed with him too ;
"A sailor to change from ship to sled,
I ween, were something new !"

All through the long, long polar day,
The vessels westward sped ;
And wherever the sail of Sir John was blown,
The ice gave way and fled—

Gave way with many a hollow groan,
And with many a surly roar,
But it murmured and threatened on every side,
And closed where he sailed before.

"Ho ! see ye not, my merry men,
The broad and open sea ?
Bethink ye what the whaler said,
Think of the little Indian's sled !"
The crew laughed out in glee.

"Sir John, Sir John, 'tis bitter cold,
The scud drives on the breeze ;
The ice comes looming from the north,
The very sunbeams freeze."

Bright summer goes, dark winter comes—
We cannot rule the year ;
But long ere summer's sun goes down,
On yonder sea we'll steer."

The dripping icebergs dipped and rose,
And floundered down the gale ;
The ships were staid, the yards were manned
And furled the useless sail.

"The summer's gone, the winter's come,
We sail not on yonder sea :
Why sail we not, Sir John Franklin ?
A silent man was he.

"The summer goes, the winter comes—
We cannot rule the year :
I ween, we cannot rule the ways,
Sir John, wherein we'd steer."

The cruel ice came floating on,
And closed beneath the lee,
Till the thickening waters dashed no more ;
'Twas ice around, behind, before—
My God ! there is no sea !

"What think you of the whaler now ?
What of the Esquimaux ?
A sled were better than a ship,
To cruise through ice and snow."

Down sank the baleful crimson sun,
The northern light came out,
And glared upon the ice-bound ships
And shook its spears about.

The snow came down, storm breeding storm,
And on the decks was laid :
Till the weary sailor, sick at heart,
Sank down beside his spade.

“Sir John, the night is black and long,
The hissing wind is bleak,
The hard green ice is strong as death :—
I prithee, captain, speak !”

“The night is neither bright nor short,
The singing breeze is cold,
The ice is not so strong as hope—
The heart of man is bold !”

“What hope can scale this icy wall,
High o’er the main flag-staff ?
Above the ridges the wolf and bear
Look down with a patient settled stare,
Look down on us and laugh.”

“The summer went, the winter came—
We could not rule the year ;
But summer will melt the ice again,
And open a path to the sunny main,
Whereon our ships shall steer.”

The winter went, the summer went,
The winter came around :
But the hard green ice was strong as death,
And the voice of hope sank to a breath,
Yet caught at every sound.

"Hark ! heard ye not the noise of guns ?
And there, and there, again ?"
" 'Tis some uneasy iceberg's roar,
As he turns in the frozen main."

"Hurrah ! hurrah ! the Esquimaux,
Across the ice-fields steal :
God give them grace for their charity !— "
"Ye pray for the silly seal."

"Sir John, where are the English fields,
And where are the English trees,
And where are the little English flowers
That open in the breeze ?"

"Be still, be still, my brave sailors !
You shall see the fields again,
And smell the scent of the opening flowers,
The grass, and the waving grain."

"Oh, when shall I see my orphan child ?
My Mary waits for me.
Oh, when shall I see my old mother,
And pray at her trembling knee ?"

“Be still, be still, my brave sailors !
 Think not such thoughts again.”
 But a tear froze slowly on his cheek ;
 He thought of Lady Jane.

“Ah ! bitter, bitter grows the cold,
 The ice grows more and more ;
 More settled stare the wolf and bear,
 More patient than before.

Oh ! think you, good Sir John Franklin,
 We’ll ever see the land ?
 ’Twas cruel to send us here to starve,
 Without a helping hand.

“’Twas cruel, Sir John, to send us here,
 So far from help or home,
 To starve and freeze on this lonely sea :
 I ween, the Lords of the Admiralty
 Would rather send than come.”

Oh ! whether we starve to death alone,
 Or sail to our own country,
 We have done what man has never done—
 The truth is founded, the secret won,
 We passed the Northern Sea !”

G. H. BOKER.

wèst-ward
joùr-ney

mùr-mured
thréat-ened

sùn-beams
íce-bergs

Sir John Franklin, a great English navigator, born at Spilsby, Lincolnshire, in 1786. In 1845 he set out on his third expedition to the Arctic regions with two ships, the *Erebus* and the *Terror*, to attempt the north-west passage. The ships and crews were lost in the ice. The expedition under Captain (now Admiral Sir Leopold) McClintock, in 1859 discovered proofs that Sir John

Franklin died on June 11, 1847.
scud, loose thin clouds driven before the wind.
drives. Transitive or intransitive?
looming, appearing dimly in the distance.
baleful, full of bale or woe, indicating sorrow or calamity.
its spears. Explain this.
Ad-mir-al-ty, the highest court of naval affairs.

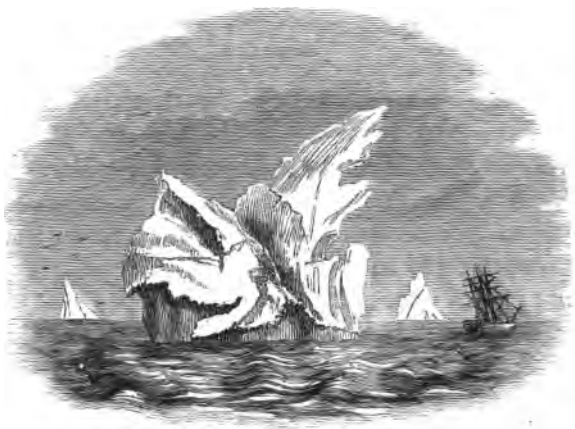
Narrate in prose this voyage of Sir John Franklin.

THE ICE OF THE SEA.

1. ICEBERGS.

WHEN sailing across the North Atlantic between ports in Europe and in the United States, or when traversing the South Pacific to round the southern promontory of the American or African continent, vessels often encounter floating masses of solid ice, termed icebergs. These are of all sizes up to huge mountain-like islands rising several hundred feet out of the water. Ice being lighter than water, an iceberg projects above the sea-level, yet has about eight times more of its bulk under water than above. Hence when the mean height of one of these floating masses is 300 feet above the surface of

the sea, its bottom must be some 2,400 feet below. The bergs vary infinitely in shape as well as in size. Sometimes, as in the Antarctic Ocean, they take the form of vast square blocks with vertical walls; sometimes they bristle into peaks and pinnacles, with deep cliffs and gullies between. At a distance they look like



Iceberg at Sea.

snow-covered islands. Seen closer, they gleam with all the intensity of colour—white, green, and blue—so characteristic of the ice of glaciers upon the land. For the most part, nothing but ice in different forms is seen upon their surface. Now and then a block of stone, or some dark earthy rubbish may be noticed. As they drift onwards into warmer latitudes they melt away,

both under water and above. Cascades of water tumble down their thawing slopes and fall into the waves below. It often happens that as the melting goes on under water, the centre of gravity of an iceberg is altered, so that the mass shifts its position, or, becoming top-heavy, turns completely over.

Such are the drifting icebergs which in summer cross the navigation track across the Atlantic between Newfoundland and Britain. They form a serious source of danger to vessels, for they may be encountered at any hour of the voyage. Many a ship has struck against one in the dark and gone to the bottom. They chill the air around them, and thus often give rise to dense fogs. A sudden fall of temperature is regarded by sailors as an indication of their approach to an iceberg, and a warning to be on the outlook.

But icebergs are not formed in the open sea, where they float until they are entirely melted. To reach their birthplace we must travel to the cold regions which surround each pole. In North Greenland, for example, the country is covered with ice, which creeps slowly down the slopes and gathers in the valleys into wide and deep masses, which not only come down to the sea-level, but actually push their way out to sea in vast walls of ice rising 300 or 400 feet above the water, and stretching sometimes for sixty miles along the coast. From time to time portions of these great tongues of ice break off and float out into the open sea. These are icebergs. They consist, therefore, not of frozen seawater, but of true land-ice. Each berg which may be



The Birthplace of the Arctic Icebergs.

met with, floating and melting far away in mid-ocean, had its origin among the snows of the Polar lands.

Since so large a proportion of an iceberg is under water, we may expect to find that these floating masses are comparatively little influenced by the winds and waves, which touch only their upper parts. The larger bergs move with the ocean-currents or drifts in which so much of their substance is immersed. Hence they may sometimes be seen moving steadily and even rapidly along, right in the face of a strong gale.

So long as the icebergs sail over deep water, they move freely about as the currents or winds may drive them. But when they get into shallow enough water to allow their bottoms to grate along the sea-floor they tear up the mud or sand there, until at last they are stranded. The coast of Labrador is often fringed with such stranded bergs, some so small as to be driven to the beach, others so large as to run aground while still a good way from the shore. Chill fogs consequently hang over that desolate region all through the summer.

<i>At-lànt-ic</i>	<i>en-count'-er</i>	<i>in-dic-a-tion</i>
<i>trà-vers-ing</i>	<i>tè-m-per-a-ture</i>	<i>en-tî-re-ly</i>
<i>Pa-ci-fic</i>	<i>in-fin-ite-ly</i>	<i>birth-place</i>
<i>A-mèr-ic-an</i>	<i>pîn-na-cles</i>	<i>Làb-ra-dor</i>
<i>Af-ric-an</i>	<i>cas-càdes</i>	<i>còn-sè-quent-ly</i>
<i>còn-tin-ent</i>	<i>com-plète-ly</i>	<i>dè-sol-ate</i>

prò-mont-or-y, cape, ness; land "forth, forward," and *mons*,
 jutting out into the sea. Lat. "mountain, hill."
promontorium, from *pro*, *ice-berg*, a berg, or hill, of ice.

Ant-arc-tic, opposite to arctic or northern; relating to the south pole. "The *Antarctic* ocean" is "the ocean *about the south pole*." Greek *anti*, opposite to, and "arctic" (see above, page 254).

vèrt-ic-al, perpendicular; straight up and down, from base to *vertex* (top, or turning point). Lat. *verto*, "I turn."

in-tens-i-ty, strength, depth.

chàr-ac-ter-ist-ic, belonging to,

or showing, the character; distinctive.

làt-i-tude, lit. *breadth*; the distance of a place north or south of the Equator.

gràv-i-ty, heaviness, weight.

Lat. *gravis*, "heavy."

com-pàr-a-tive-ly, as compared with what one would expect.

in-flù-enced, affected; moved on or held back.

im-mèrsed, sunk, plunged. Lat.

im (*in*), "into," and *mergo*,

mersum, "to plunge."

Exercise.—(1) Expand the expressions: "warmer latitudes," "the navigation track," "the Polar lands."

(2) Vary the sentence: "A sudden fall of temperature is regarded by sailors as an indication of the approach of an iceberg."

2. FROZEN SEA-WATER.

FLOE ICE, OR FIELD ICE.

BESIDES the icebergs, two other kinds of ice are found on the sea in high latitudes, both derived from the freezing of the water of the sea itself. As voyagers advance into the narrow seas about the pole, they encounter great sheets of ice, which, at first in irregular, scattered fragments, become larger in size and more continuous in extent, until at last the whole expanse of the sea, as far as the eye can reach, is covered with ice. This is known as *floe ice*, or *field ice*, and is due to the freezing of the surface-water of the sea during the

intense frost of Polar winters. When the sea-water freezes, the salt is left behind by the ice, which, except for the little salt vesicles entangled in it, is fresh, and, when thawed, quite drinkable. In early summer, the ice-field, or sheet of ice, which, stretching outwards from the land, may be regarded as continuous for hundreds of miles during winter, begins to break up and float away. If the sea remained motionless, it would, by the end of winter, be covered with a sheet of ice about eight feet thick. But owing to the pressure arising partly from the movements of tides and currents in the water, partly from changes of temperature and atmospheric pressure, including winds and storms, the ice-sheet is liable to continual disruption. Cracks are formed abundantly through it, and portions are squeezed up or broken into innumerable huge fragments, which are pushed over each other until the frozen sea becomes like a heap of ruins. And these movements are accompanied with sharp reports, as of cannon, and with loud growling noises, as if some monsters of the deep were engaged below in fierce and angry warfare. Some notion of the appearance of this broken-up ice may be formed from the figure on the opposite page. This represents a scene in the memorable Arctic voyage of the Austrian vessel *Tegetthoff*, which, after almost incredible endurance, was eventually abandoned by the courageous crew, who, taking to boats or sledges drawn by dogs, pushed across the frozen sea and reached Novaya Zemlya.

In consequence of the breaking up of the vast sheet of

ice, openings are formed in which the unfrozen water can be seen, until it is fast bound in ice by the cold. These water-channels or lanes, between the separated fragments, are the passages by which vessels make their



Scene among the disrupted ice of the frozen Arctic Sea.

way through the ice-pack. But as the great sheets are carried against each other in the general movement, it sometimes happens that a ship is caught between them, and pushed up on the floe, or crushed so effectually that

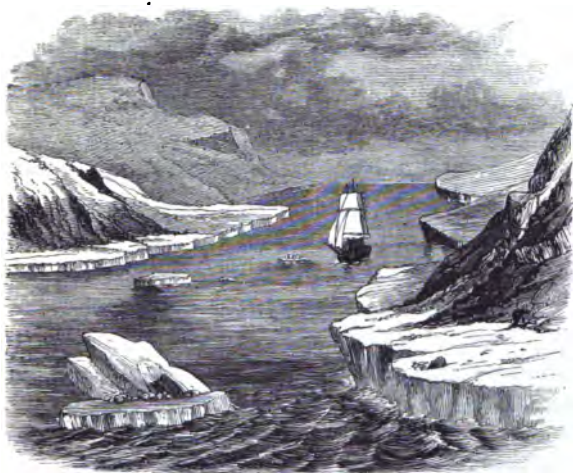
it goes to the bottom as soon as the fragments of ice separate again.

Except where piled in heaps by pressure, which breaks up its surface as well as its outer edges, floe-ice occurs in level sheets, the surface of which rises but little above the level of the sea. It never rivals the height and grandeur of true icebergs, though it covers a much wider space of sea. Nor does it travel so far from the regions of its birth. When the ice-field breaks up in summer, the portions next the land may remain there, and of these indeed some parts may continue unmelted for generations. But other parts further from shore, and sometimes many hundreds of square miles in extent, are loosened and carried away by the sea-currents which drift from the pole. Vessels frozen into the ice-fields have in this way been carried many hundreds of miles, until disengaged by the disruption and thawing of the ice. Some of the icebergs from Greenland, however, travel much further south, and may be met with now and then even as far south as lat. 37° , that is, about the same parallel as Richmond in Virginia, and Cape St. Vincent in the south of Spain.

THE ICE-FOOT.

When the sea freezes along the margin of the land, as it does in a remarkable way in North Greenland, it forms a cake of ice, which, rising with the tide, is frozen to the shore. By degrees a shelf of ice, called the *ice-foot*, rising from twenty to thirty feet above the general

level of the floe, and having a width of 120 feet or more, forms along the coast and clings to it all winter. Immense quantities of earth and stones, dislodged from the coast cliffs by the severe frost of the Arctic winter, fall upon the ice-foot, so that its surface becomes in some places a field of rubbish which completely covers and conceals the ice



The Ice-foot of Greenland.

underneath. When the summer storms come, this shore-terrace of ice is broken up, and large pieces of it, laden with the waste of the cliffs, are floated away out to sea, there to join the fleets of bergs and broken sheets of floe-ice. Some portions are driven ashore again, others are caught and frozen fast into the floe-ice of next winter,

while others succeed in escaping into the more open sea, where they gradually melt and tumble their load of earth and stones on the sea-bottom.

GROUND-ICE.

Floe-ice and the ice-foot are formed by the freezing of the surface of the sea. There is yet another way in which some of the ice of the sea takes its origin, namely, by the freezing of the water lying on the sea-bottom. This is known as *ground-ice*. It is probably formed only in inclosed and shallow seas and inlets, and is of little consequence compared with the thick and wide sheets of floe-ice. It is well known in the Baltic Sea. In still weather, before the surface of that sea is frozen, little thin cakes of ice may be observed floating about, sometimes with portions of sand or scattered pebbles imbedded in them. These are formed on the bottom, from which they break away and rise to the surface. They form a source of some danger, at least to small boats, for they sometimes appear suddenly in such numbers as to cover the sea, the surface of which is then apt to freeze too, so that the boats are in danger of being nipped between the detached ice-rafts, or of being beset and frozen into the united cake of ice. Sometimes large blocks of rock as well as masses of seaweed are borne away from the sea-floor and carried to the surface by the ascending sheets of ground-ice. In the rivers of cold countries, as for instance, in the St. Lawrence, similar ground-ice is formed in winter, sometimes round iron chains or

anchors, which, if the inclosing ice is thick enough, may actually be lifted by it.

PROFESSOR ARCHIBALD GEIKIE.

<i>làt-i-tudes</i>	<i>en-tàn-gled</i>	<i>dis-lòdged</i>
<i>de-rived</i>	<i>drìnk-a-ble</i>	<i>growl'-ing</i>
<i>ir-règ-ùl-ar</i>	<i>in-clúd-ing</i>	<i>war'-fare</i>
<i>scàt-tered</i>	<i>ab-ùnd-ant-ly</i>	<i>cour-àge-ous</i>
<i>ef-fèct-ù-al-ly</i>	<i>in-nu'-mer-a-ble</i>	<i>quan'-ti-ties</i>
<i>gràd-ù-al-ly</i>	<i>a-scènd-ing</i>	<i>be-sèt</i>

con-tin-ù-ous, unbroken, without gaps or breaks. Lat. *con*, "together," and *teneo*, "I hold."

ex-pànse, stretch, wide extent. Lat. *ex*, "out," and *pansum*, "to spread."

vès-i-cles, little bladders, or bladder-like cavities.

at-mo-sphèr-ic, of the atmosphere, or the air.

dis-rùp-tion, breaking up, bursting in pieces. Lat. *dis*, "asunder," and *ruptum*, "to break, or burst."

in-crèd-i-ble, beyond belief. Lat. *in*, "not," *credo*, "I

believe," and *ible* (Lat. *ibilis*), "able, fit"; "not fit or able to be believed."

en-dur'-ance (*-dyúr-*), suffering, standing out or bearing up (against hardships).

e-vent-ù-al-ly, in the event, in the long run; this is what came out of the situation at the last.

a-bàn-doned, given up, left to its fate.

im-bèd-ded, placed or fixed (in them) as if in a bed.

de-tàched, unfastened, separated, set loose.



SIR HUMPHREY GILBERT.

SOUTHWARD with fleet of ice
Sailed the corsair Death ;
Wild and fast blew the blast,
And the east wind was his breath.

His lordly ships of ice
Glistened in the sun ;
On each side, like pennons wide,
Flashing crystal streamlets run.

His sails of white sea-mist
Dripped with silver rain ;
But where he passed there were cast
Leaden showers o'er the main.

Eastward from Campobello
Sir Humphrey Gilbert sailed ;
Three days or more seaward he bore,
Then, alas ! the land-wind failed.

Alas ! the land-wind failed,
And ice-cold grew the night :
And never more, on sea or shore,
Should Sir Humphrey see the light.

He sat upon the deck,
The Book was in his hand ;
"Do not fear ! Heaven is as near,"
He said, " by water as by land !"

In the first watch of the night,
Without a signal's sound,
Out of the sea, mysteriously,
The fleet of Death rose all around.

The moon and the evening star
Were hanging in the shrouds ;
Every mast, as it passed,
Seemed to rake the passing clouds.

They grappled with their prize,
At midnight black and cold !
As of a rock was the shock ;
Heavily the ground-swell rolled.

Southward through day and dark,
They drift in close embrace,
With mist and rain, to the Spanish Main ;
Yet there seems no change of place.

Southward, for ever southward,
They drift through dark and day :
And like a dream, in the Gulf-Stream
Sinking, vanish all away.

LONGFELLOW.

south'-ward
crÿs-tal

lead-en
shàd-ows

em-bráce
vàn-ish

Sir Humphrey Gilbert, born 1539 at Dartmouth ; an elder half-brother of Sir Walter Raleigh. He went out to North America to establish settlements and to search for silver mines, in 1578, and again in 1583. He was drowned on his second voyage home again, Nov. 9, 1583. His frigate, *The Squirrel*, was only of ten tons burden.

pèn-non, or "pèn-nant," a flag pointed at the ends. Lat. *penna*, "a feather, or wing."

còr-sair, pirate, sea-rover. French *corsaire*, from Lat. *cursus*, "course, voyage," from *curro*, "I run."

Càmpobèllo, an island of New Brunswick.

mÿs-tér-i-ous-ly, no one could tell how.

Spànish Main, (the sea opposite) the part of the mainland held by the Spaniards.

Gulf Stream, a great ocean-current of warm water, which flows out of the Gulf of Mexico.

SPRINGS.

MARK what happens when a heavy shower of rain falls upon dry ground. If the ground be formed of hard and solid rock, such as granite, the rain, after wetting the surface, runs off in all directions ; some finding its way to the nearest streamlet, whence it flows sooner or later into a river, and some finding lodgment in little hollows of the rock, where it collects in pools which are slowly dried up by wind and sunshine. But if

the ground, instead of being hard like granite, is soft and porous like sand or chalk, the water will then sink into its substance, and may even pass out of sight without so much as wetting the surface of the thirsty soil. Rocks which thus allow water to filter through them are said to be *permeable*, while those which refuse to allow the water to soak in are said to be *impermeable*: a bed of sand, for example, is permeable; a bed of clay impermeable.

It is by no means necessary, however, that a rock, in order to be porous and permeable, should be either soft like chalk, or loose like sand. Take for instance a sandstone, or a hard limestone: these rocks are sufficiently coherent to form durable building stones, yet porous enough in most cases, to allow water to drain more or less freely through them. The particles of which the rock is made up are themselves impermeable, but they are so built together that little spaces, or interstices, are generally left between the individual particles, and the result is the formation of a rock which, hard as it may be, presents a texture approximately like that of a sponge. The water trickles between the particles of such a rock, and thus gradually soaks through its mass. Close in grain as the rock may appear to the eye, it is nevertheless capable, in most cases, of absorbing water; and, hence, stone when freshly taken from the quarry usually holds moisture, known to the workman as "quarry water." Even when a rock offers too close a texture to admit moisture freely, it commonly happens that it is more or less fissured; and the water which

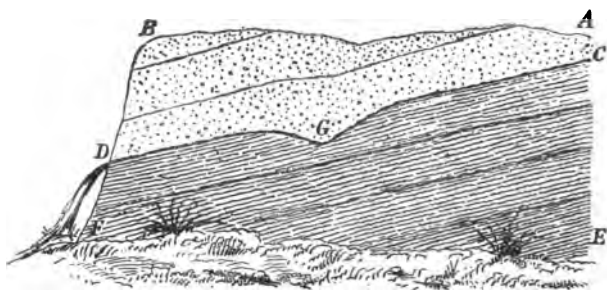
falls upon the rock then dribbles through the little cracks, and thus gains ready access to subterranean channels, much in the same way as it would if the rock were of open texture.

After a good deal of rain has fallen upon a porous rock, its pores become choked with water, and the rock at last gets saturated, like a piece of sugar which has been dipped for a few moments into a cup of tea. If more rain now fall upon the rock, it can no longer be sucked in and retained, but will flow off the damp surface, just as it would from the surface of an impermeable rock.

Suppose a layer of a porous substance to rest upon a bed of comparatively impervious rock, and it is easy enough to see what, under such circumstances, will become of the rain which falls upon the surface. Let the figure on the opposite page illustrate such a case. Here the dotted part of the figure, A B C D, represents a permeable rock, say beds of sand, whilst the lower shaded portion, C D E F, indicates an impermeable rock, say a stiff clay. It is supposed, in a figure such as this, that the rocks in question have been cut through so as to expose clean-cut surfaces, and hence such diagrams, which are constantly used in writings on the structure of the earth, are termed *sections*. Natural sections are frequently exposed in river-beds, sea-cliffs, and inland valleys; whilst artificial sections are seen in wells and shafts, in mines and quarries, and especially in railway-cuttings. A good general notion of the character of the rocks

forming a given country may often be gained, during a railway journey, by observing the cuttings along the line.

It is clear that when rain falls upon the surface A B, it will be readily absorbed, at least if the sandy rock be dry, and will gradually sink lower and lower until it reaches the bottom of the upper bed C D. Here it comes in contact with the surface of the clay, and, as the clay refuses to absorb the water, its downward course



Formation of a spring.

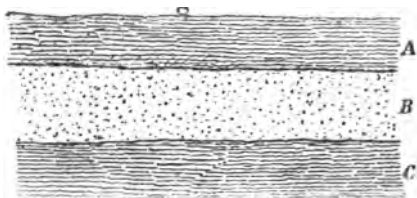
is arrested. Should the surface of the clay present irregularities, the water which has percolated through the sandy bed will lodge in the hollows, as at G. But when such cavities have become filled, the water with which the rock is charged will flow over them, and continue to run down in whatever direction the rocks may chance to slope.

It rarely happens that the successive layers of rock, or as they are technically called *strata*, exposed in any given section are perfectly horizontal, or spread out with flat

surfaces, like the surface of a piece of still water. Generally the beds slope or incline in a definite direction, and this slope is technically termed the *dip*. If then we read in a scientific description of a given section that "the strata dip 30° S.W." it means simply that the layers of rock slant in a south-westerly direction, and make an angle of thirty degrees with a perfectly horizontal surface. Thus, in the diagram the dip is shown by the general direction of the line C D, and its amount may be measured by the inclination of this line to the horizon; that is, by the angle which the line C D makes with the top or the bottom edge of the page, when these edges are horizontal. Now when the water, having percolated through the sandy rock A B C D, has reached the junction represented in section by C D, it flows down this plane in the direction of the dip, and escapes at the first outlet, as at D. Such a flow of water thrown out from a rock constitutes a *spring*.

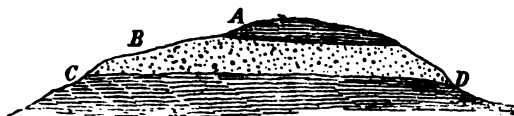
Springs of this simple character, which issue at the junction of permeable and impermeable strata, are extremely common. But, from the cases in which a porous rock rests upon one that is not sensibly porous, it is desirable to advance to the case in which the porous material is not only supported, but is also covered, by an impermeable stratum; the pervious substance being thus inclosed between two impervious beds, one forming its floor and the other its roof. Thus, the sandy stratum B, in the figure below, is supported by one bed of clay, C, and covered by another, A. As long as the strata remain in the horizontal position here

represented, the rain which falls upon the surface of A is effectually prevented from reaching the porous material B, save only through any cracks which may happen to run through the upper bed. Though the material of B may be as porous as a sponge, not a drop of water can



Horizontal permeable and impermeable strata.

reach it, as long as the waterproof roof remains sound. But the case is extremely different when the beds are inclined, as represented in the next figure. Here are three beds, in the same order as those previously described, but dipping at a slight angle. The porous bed

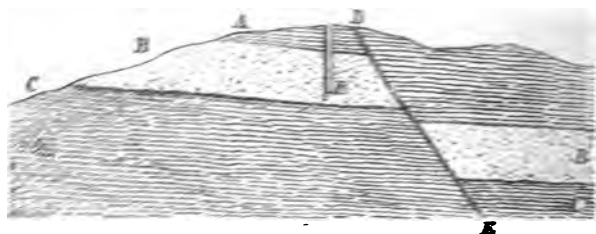


Inclined permeable and impermeable strata.

B is exposed at the surface, or as a geologist would say "crops out." Rain falling upon the ground A B C is thrown off by the two clay beds A and C, but is absorbed by the out-crop, or exposed surface, of the sandy stratum B. This absorbed water, whether directly

falling upon B or drained off from A runs down in the direction of the dip until it reaches an outlet, whence it issues as a spring. If a valley should cut through the beds and have its bottom below the water-level, springs will be thrown out along the sides of the valley, as at D.

In following the course of a set of strata, it is no uncommon thing for the geologist to find that they come abruptly to an end, that their continuity is suddenly broken, and that one set of beds abuts upon



Effect of fault on position of spring or well.

another along a sharply-defined plane. The beds have, indeed, been fractured, and have slid one over another. Such a fracture, accompanied by displacement of the strata, constitutes what geologists call a *fault*. Thus, the set of beds represented above have been broken along a plane represented in section by the line D E; and, though once continuous, are now dislocated; the bed A having been thrown down to A', the bed B having slipped to the position B', and the bed C to C'. The drainage received by the surface of the porous stratum

B, will flow down until it reaches the fault, where it will be prevented from escaping by the clay wall of A'. If therefore a bore-hole be put down to F, the water which has percolated through the bed down to this point will be forced upwards by the pressure of the water in the surrounding rock, and will therefore rise in the hole to nearly the level which it occupies in the bed B. Or, in the absence of a bore-hole, the water will escape from the saturated bed B, by oozing out at the surface, near the junction of the adjacent strata. It is obvious, from this illustration, that faults must be of great importance in determining the position of springs and wells.

PROFESSOR HUXLEY.

<i>il-lùs-trate</i>	<i>gě-d-lo-gist</i>	<i>tět-ure</i>
<i>hor-iz-ònt-al</i>	<i>dis-pláce-ment</i>	<i>moist'-ure</i>
<i>de-scrip-tion</i>	<i>ad-já-cent</i>	<i>sēc-tions</i>
<i>sci-en-ti-fic</i>	<i>dur'-a-ble (dyúr-)</i>	<i>còn-tact</i>
<i>ef-fěct-ű-al-ly</i>	<i>pārt-i-cles</i>	<i>gràn-ite</i>
<i>thòr-ough-ly</i>	<i>ab-sòrb-ing</i>	<i>pór-ous</i>

pěr-mě-a-ble, that may be passed through (by water, light, &c.,) without disturbing the parts. Lat. *per*, "through," and *meo*, "I go, pass, or penetrate."

co-hér-ent, holding, or sticking together. Lat. *co* (*con*), "together," and *hæreo*, "I stick, or cling."

in-těr-sti-cēs, narrow or small spaces between bodies. Lat.

inter, "between," and *sistere*, "to place, or stand."

ap-pròx-i-mate-ly, nearly; on a close calculation. Lat. *ap* (*ad*), "to," and *proximus*, "nearest."

fis-sured, marked or cut up by fissures—splits, or rifts. Lat. *fissum*, "to cleave."

sub-ter-rá-ne-an, under-ground. Lat. *sub*, "under," and *terra*, "the earth."

sât-ûr-ate, fill full (of moisture, water, &c.) ; not as a jar, but as a sponge or as a lump of sugar dipped in water. Lat. *satur*, "full."

com-pâr-a-tive-ly, as compared with another.

im-pér-vi-ous, impenetrable ; through which there is no way or passage. Lat. *im* (*in*), "not," *per*, "through," and *via*, "a way."

dî-a-grams, sketches, drawings, figures, plans. Greek *dia*, "through," and *gramma*, "a mark, or line drawn."

ir-rég-ûl-âr-i-ties, uneven parts ; heights and hollows.

pér-col-ate, to strain or filter through. Lat. *per*, "through," and *colo*, "I strain."

têch-nic-al-ly (*têk-*), according to the usage of a particular art or profession. Greek *techne*, "art."

strâ-ta, Lat., plural of *stratum* ; lit. things extended or spread out ; beds, or layers—

especially as laid one above another.

in-clin-â-tion, leaning or bending towards. Lat. *in*, "in, upon," and *clino*, "I bend."

junc-tion, a joining. Lat. *junctum*, "to join."

sens-i-bly, so as to be felt. Lat. *sensum*, "to feel."

ab-rupt-ly, as if broken off, suddenly and without warning. Lat. *ab*, "from, off, away," and *ruptum*, "to break."

con-tin-u'-i-ty (*-yû-*), unbrokenness ; holding together without a break. Lat. *con*, "together," and *teneo*, "I hold."

a-bût, to touch, border upon. French, *aboutir*, from *à*, "at," and *bout*, "the end."

frâc-ture, breaking, break. Lat. *fractum*, "to break."

dis-loc-ate, remove from its place ; put out of joint, or due order. Lat. *dis*, "asunder," and *locus*, "a place."





AUTUMN.

THE warm sun is failing, the bleak wind is wailing,
 The bare boughs are sighing, the pale flowers are dying,
 And the year
 On the earth her deathbed, in a shroud of leaves dead,
 Is lying.
 Come, months, come away,
 From November to May,
 In your saddest array ;

Follow the bier
Of the dead cold year,
And like dim shadows watch by her sepulchre.

The chill rain is falling, the night worm is crawling,
The rivers are swelling, the thunder is knelling
For the year ;
The blithe swallows are flown, and the lizards each
gone

To his dwelling ;
Come, months, come away,
Put on white, black, and grey ;
Let your light sisters play—
Ye, follow the bier
Of the dead, cold year,
And make her grave green with tear on tear.

SHELLEY.

bough (bou)
shroud

crawl-ing (krōl-)
knell-ing (nèl-)

blithe
lizards

ar-ray, dress. Compare next stanza.

bier (bér), the wooden frame,
or carriage, on which men

bear the dead to the grave.
sepulchre, grave, burying-
place. Lat. *sepulcrum*, from
sepultum, "to bury."



THE BATTLE OF HASTINGS.

[“ON the death of Edward the Confessor, Harold, son of Earl Godwine, sought the crown, and had himself chosen king. This woke rivalry and dissension among the other nobles, and so laid England open to the ambition of its neighbour over-sea, William the Duke of the Normans. Pretending that the Confessor had named him as his successor, William crossed the Channel with a great army, and landing at Pevensey marched to the field of Senlac, north of the town of Hastings, and near to the present town of Battle, to which the fight that followed gave its name. Here he found Harold with an English army, awaiting his attack on a low hill or rise of ground, which he had strengthened with barricades.”—J. R. GREEN.]

KING HAROLD had risen early and had put his men in order. On the slope of the hill, just in the face of William's army as it came from Hastings, he planted the two ensigns which were always set up in an English royal army, and between which the King had his royal post. The one was the golden Dragon, the old ensign of Wessex; the other was the Standard, which seems to have been the King's own device. King Harold's Standard was a great flag, richly adorned with precious stones and with the figure of a fighting-man wrought upon it in gold. As the English thus had two ensigns, they had also two war-cries. They shouted “God Almighty,” which I take to have been the national war-cry, and they also shouted “Holy Cross,” that is, no doubt, the Holy Cross of Waltham,

which King Harold held in such reverence. Perhaps this last was the cry of the King's own men. For there were in the English army two very different kinds of men. There were King Harold's own followers, his own kinsmen and friends and Thanes and housecarls, the men of whom the Northmen said that any one could fight any other two men. These were in short the men who had won the fight of Stamfordbridge. They wore coats of mail, and they had javelins to hurl at the beginning of the fight, and their great two-handed axes to use when the foe came to close quarters. But besides these tried soldiers there were the men who came together from the whole South and East of England, who were armed as they could arm themselves, many of them very badly. Most of them had no coats of mail or other armour, and many had neither swords nor axes. Some of them had pikes, forks, anything they could bring; a very few seem to have had bows and arrows. Now in a battle on the open ground these men would have been of no use at all; the Norman horsemen would have trampled them down in a moment. But even these badly armed troops, when placed on the hill side, behind barricades, could do a good deal in driving the Normans back as they rode up. But as far as I can see, King Harold put these bad troops in the back, towards what we may call the isthmus of the peninsula, where the worse troops on the other side were likely to make the attack. But his picked men he put in front, where the best troops of the enemy were likely to come.

Thus the English stood on the hill ready for the French host, horse and foot, who were coming across from Telham to attack them. About nine o'clock on Saturday morning they came near to the foot of the hill. The Norman army was in three parts. Alan and the Bretons had to attack on the left, to the west of the Abbey buildings. Roger of Montgomery with the French and Picards were on the right, near where the railway station is now. Duke William himself and the native Normans were in the midst, and they came right against the point of the hill which was crowned by the Standard, where King Harold himself stood ready for them.

And now began the great battle of Senlac or Hastings. The Norman archers let fly their arrows against the English; then the heavy-armed foot were to come up; and lastly the horsemen. They hoped of course that the shower of arrows would kill many of the English and put the rest into confusion, and that the heavy-armed foot would then be able to break down the barricades, so that the horsemen might ride up the hill. But first of all a man named, or rather nicknamed, *Taillefer* or *Cut-iron*, rode out alone from the Norman ranks. He was a juggler or minstrel, who could sing songs and play tricks, but he was a brave man all the same, and he asked Duke William's leave that he might strike the first blow, hand to hand. So Taillefer the minstrel rode forth, singing as he went, like Harold Hardrada at Stamfordbridge, and, as some say, throwing his sword up in the air, and catching it

again. As he came near to the English line, he managed to kill one man with his lance and another with his sword, but then he was cut down himself. Then the French army pressed on at all points, shouting "God help us," while our men shouted "God Almighty" and "Holy Cross." They tried very hard, first the foot and then the horse, to break down the barricade. But it was all in vain. The English hurled their javelins at them as they were drawing near, and when they came near enough, they cut them down with their axes. The Norman writers themselves tell us how dreadful the fight was, and how the English axe, in the hand of King Harold or of any other strong man, cut down the horse and his rider with a single blow.

Duke William and his army tried and tried again to get up the hill, but it was all in vain; our men did not swerve an inch, and they cut down every Frenchman who came near, King Harold himself and his brothers fighting among the foremost. Soon the French lines began to waver; the Bretons on the right turned and fled, and soon the Normans themselves followed. The English were now sorely tempted to break their lines and pursue, which was just what King Harold had told them not to do. Some of them, seemingly the troops in the rear, where the Bretons had first given way, were foolish enough to disobey the King's orders, and to follow their flying enemies down into the plain. It seemed as if the French were utterly beaten, and a cry was raised that Duke William himself was dead. So,

just as our King Edmund had done at Sherstone, he tore off his helmet that men might see that he was alive, and cried out, "I live, and by God's help I will conquer." Then he and his brother the Bishop contrived to bring their men together again. They turned again to the fight; those who were pursued by the English cut their pursuers in pieces, and another assault on the hill began. Duke William this time had somewhat better luck. He got so near to the barricade just before the Standard that Earl Gyrth, who we know fought near his brother the King, was able to hurl a spear directly at him. It missed the Duke, but his horse was killed and fell under him, as two others did before the day was out. Duke William then pressed on on foot, and met Gyrth face to face, and slew him with his own hand. Earl Leofwine too was killed about the same time, and Roger of Montgomery and his Frenchmen on the right contrived to break down part of the barricade on that side.

So this second attack was by no means so unsuccessful as the first. The two Earls were killed, and the barricade was beginning to give way. Still Duke William saw that he could never win the battle by making his horsemen charge up the hill in the teeth of the English axes. He saw that his only chance was to tempt the English to break their shield-wall, and come down into the plain. So he tried a very daring and dangerous trick. He had seen the advantage which by his good generalship he had contrived to gain out of the real flight of his men a little time before; so he

ordered his troops to pretend flight, and, if the English followed, to turn upon them. And so it was; the whole French army seemed to be fleeing a second time; so a great many of the English ran down the hill to chase them. As far as I can make out, it was only the light-armed, the troops on the right, who did this; I do not think that any of King Harold's own housecarls left their ranks. But presently the Normans turned, and now the English had to fly. Those who had made this great mistake did their best to make up for it. Some managed to seize a little hill which rose in front of the English position, and thence they hurled down javelins and stones on those who attacked them, and thus they completely cut off a party who were sent against them. Others, who knew the ground well, led the Frenchmen who chased them to a place near the isthmus where the ground is very rough, and where there is a little narrow cleft with steep sides, all covered with bushes and low trees. So the Normans came riding on, and their horses came tumbling head over heels into the trap which was thus ready for them, and the English who were flying now turned round and killed the riders.

All this was bravely and cleverly done; but it could not recover the battle, now that King Harold's wise orders had once been disobeyed. The English line was broken; the hill was defenceless at many points; so the Normans could ride up, and the battle was now fought on the hill. The fight was by no means over yet; the English had lost their great advantage of the

ground ; but King Harold and all his mighty men were still there ; so they still formed their shield-wall and fought with their great axes. Luck had no doubt turned against the English ; still they were by no means beaten yet, and it is by no means clear that they would have been beaten after all, if King Harold had only lived till nightfall. Here, as always in these times, everything depended on one man. Harold still lived and fought by his Standard, and it was against that point that all the devices of the Normans were now aimed. The Norman archers had begun the fight, and the Norman archers were now to end it. Duke William now bade them shoot up in the air, that the arrows might fall like bolts from heaven. This device proved the most successful of all ; some men were pierced right through their helmets ; others had their eyes put out ; others lifted up their shields to guard their heads, and so could not wield their axes so well as before. King Harold still stood—you may see him in the Tapestry, standing close by the Golden Dragon, with his axe in his hand, and his shield pierced with several arrows. But now the hour of our great King was come. Every foe who had come near him had felt the might of that terrible axe, but his axe could not guard against this awful shower of arrows. One shaft, falling, as I said, from heaven, pierced his right eye, he clutched at it and broke off the shaft ; his axe dropped from his hand, and he fell, all disabled by pain, in his own place as King, between the two royal ensigns. Twenty Norman knights swore to take

the Standard now that the King no longer defended it; they rushed on; most of them were killed by the English, who still fought around their wounded King; but those who escaped succeeded in beating down the Standard of the Fighting Man and in bearing off the Golden Dragon. That ancient ensign, which had shone



over so many battlefields, was never again carried before a true English King. Then four knights, one of whom was Count Eustace, rushed upon King Harold as he lay dying; they killed him with several wounds, and mangled his body. Such was the end of the last native King of the English, Harold the son of

Godwine. He fell by the most glorious of deaths, fighting for the land and the people which he had loved so well.

But still the fight was not over. Such of the housecarls and other picked men as still lived still fought on, and, as far as I can see, they were all killed at their posts. Abbot Ælfwig and his twelve monks were all killed, and Abbot Leofric was sore wounded, but he got home to Peterborough and died soon after. I fancy that he must have been one of those who were carried off the next day among the dead bodies. One story says that King Harold himself was carried off in this way, and lived for some time after, but we know that this is not true. I fancy that all those of the picked men who escaped at all escaped in this way. We hear nothing of any prisoners being taken, nothing of any of the axemen taking to flight. But as it grew dark, those of the light-armed men who were left fled, some of them on the horses on which their leaders, though they fought on foot, had ridden to the battle. Duke William and the Normans followed them, but the English, who knew the ground, were able even now to do the Normans a great damage. On the north side, near where the parish church now stands, the side of the hill is very steep and the ground at the bottom is swampy. The English had the art to entice the pursuers to follow them to this point, where, now in the dark, they had even worse luck than they had had on the other side of the hill earlier in the day. Again the Norman horses and horsemen came tumbling down the

steep place, where some were choked in the swamp, and others were killed by the English, who turned and took no small vengeance for their own defeat and the death of their King. Thus the Normans suffered a very heavy loss even after they had gained the day, besides all the men who had been killed earlier in the battle. I do not suppose there ever was a more hard-fought battle, or one in which more courage and skill was shown on both sides. The English lost the day, but, as far as good fighting was concerned, they certainly lost no honour.

The great battle being over, Duke William came back to the hill, and stayed there all night. He had the dead bodies swept away around where the Standard had stood, and there he pitched his tent and did eat and drink.

E. A. FREEMAN.

<i>riv-al-ry</i>	<i>àb-bey</i>	<i>un-suc-cèss-ful</i>
<i>prè-tènd-ing</i>	<i>con-fu'-sion (-fyú-)</i>	<i>gèn-er-al-ship</i>
<i>suc-cèss-or</i>	<i>seem'-ing-ly</i>	<i>de-fènce-less</i>
<i>strèngth-ened</i>	<i>dis-ob-ey' (-á)</i>	<i>án-cient</i>

dis-sèn-sion, strife, difference of opinion. Lat. *dis*, "asunder," and *sensum*, "to think."

bâr-ri-ca-des, barriers hastily thrown up to stop the way.

èn-signs, flags, banners. French *enseigne*, from Lat. *insignia*, from *en* (*in*), "in," and *signum*, "a mark or sign."

rè-ver-ence, respect and affection mixed with awe or fear.

thanes, "nobles who were bound to fight for their lords." (Green.)

house-carls, "soldiers kept specially for the king's service." (Green.)

Stamfordbridge. "Just before

William's landing, Harold had fought and beaten at Stamfordbridge his own brother Tostig, who had invaded England with an army of Northmen under their king, Harold Hardrada." (Green.)

jäv-e-lin, long light spear; a wooden shaft shod with iron.

isth-mus (*ist-mus*), lit. a passage; a neck, or narrow strip of land joining two larger portions of land.

pen-in-sū-la, a piece of land almost an island (Lat. *pæne*, "almost," and *insula*, "an island"). "The ground on which the English army stood was a low rise, cut off from

the ground near it, and so like a peninsula." (Green.)

as-sault, sudden and violent attack, onset. French *assaut*, Lat. *ad*, "to, upon," and *salio*, "I leap."

tāp-es-try, a sort of carpeting, commonly of wool and silk, with figures inwrought, and often with gold and silver embroidery; used for hangings, &c. French *tapisserie*, from *tapis* (Lat. *tapete*, Greek *tapes*), "carpet."

"At Bayeux is preserved a long roll of linen, on which is worked the story of the Norman Conquest, perhaps by the hand of William's queen, Matilda." (Green.)

THE BRAVE DEPARTED.

REST on your battle-fields, ye brave !
 Let the pines murmur o'er your grave,
 Your dirge be in the moaning wave—
 We call you back no more !

Oh ! there was mourning when ye fell,
 In your own vales a deep-toned knell,
 An agony, a wild farewell—
 But that hath long been o'er.

Rest with your still and solemn fame ;
The hills keep record of your name,
And never can a touch of shame
Darken the buried brow.

But we on changeful days are cast,
When bright names from their place fall fast ;
And ye that with your glory pass'd,
We cannot mourn you now.

MRS. HEMANS.

DON QUIXOTE AND THE WINDMILLS.

ENGAGED in this discourse, they came in sight of thirty or forty windmills, which are in that plain ; and as soon as Don Quixote espied them he said to his squire : " Fortune disposes our affairs better than we ourselves could have desired ; look yonder, friend Sancho Panza, where thou mayest discover somewhat more than thirty monstrous giants, whom I intend to encounter and slay ; and with their spoils we will begin to enrich ourselves ; for it is lawful war, and doing God good service to remove so wicked a generation from off the face of the earth."

" What giants ? " said Sancho Panza.

" Those thou seest yonder," answered his master, " with their long arms ; for some are wont to have them most of the length of two leagues."

"Look, sir," answered Sancho, "those which appear yonder are not giants, but windmills; and what seem to be arms are the sails, which, whirled about by the wind, make the millstone go."

"It is very evident," answered Don Quixote, "that thou art not versed in the business of adventures: they are giants; and, if thou art afraid, get thee aside and pray, whilst I engage with them in fierce and unequal combat."

So saying, he clapped spurs to his steed, notwithstanding the cries his squire sent after him, assuring him that they were certainly windmills, and not giants. But he was so fully possessed that they were giants, that he neither heard the outcries of his squire Sancho, nor yet discerned what they were, though he was very near them, but went on crying out aloud: "Fly not, ye cowards and vile caitiffs! for it is a single knight who assaults you." The wind now rising a little the great sails began to move, upon which Don Quixote called out: "Although ye should have more arms than the giant Briareus, ye shall pay for it."

Then recommending himself devoutly to his Dulcinea, beseeching her to succour him in the present danger, being well covered with his buckler, and setting his lance in the rest, he rushed on as fast as Rozinante could gallop, and attacked the first mill before him; when, running his lance into the sail, the wind whirled it about with so much violence that it broke the lance to shivers, dragging horse and rider after it, and tumbling them over and over on the plain in very evil plight.

Sancho Panza hastened to his assistance as fast as his ass could carry him; and when he came up to his master he found him unable to stir, so violent was the blow which he and Rozinante had received in their fall.

"Heaven save me!" quoth Sancho; "did not i warn you to have a care of what you did, for that they were nothing but windmills? And nobody could mistake them but one that had the like in his head."

"Peace, friend Sancho," answered Don Quixote, "for matters of war are, of all others, most subject to continual change. Now I verily believe, and it is most certainly the fact, that the sage Freston, who stole away my chamber and books, has metamorphosed these giants into windmills, on purpose to deprive me of the glory of vanquishing them, so great is the enmity he bears me! But his wicked arts will in the long run avail but little against the goodness of my sword."

"Heaven grant it!" answered Sancho Panza. Then helping him to rise, he mounted him again upon his steed, which was almost disjointed.

CERVANTES.

<i>en-gaged</i>	<i>mèn-strous</i>	<i>génération</i>
<i>dis-course'</i>	<i>en-coun'-ter</i>	<i>league (lég)</i>
<i>e-spiéd</i>	<i>un-e'-qual</i>	<i>adventures</i>
<i>dis-cèrned</i>	<i>ví-o-lence</i>	<i>plight (plít)</i>
<i>as-sault' (-sölt)</i>	<i>dis-joint'-ed</i>	<i>vànquishing</i>
<i>àn-swèred</i>	<i>vèr-i-ly</i>	<i>evident</i>

squire, short for "esquire," one that attended on a knight and bore his lance and shield. French, *escuyer* (now *écuyer*), from *escu* (*écu*), "a shield." The French forms correspond to the Latin *scutarius*, *scutum*. The initial "e" is added for easy pronunciation.

versed, well skilled in, thoroughly acquainted with. Lat. *versum*, "to turn."

car-tiff (*ká-tif*), wretch. French *chétif*, Lat. *captivus*, "captive," hence "base," "vile," "mean."

Brâ-àr-e-us, a giant with a hundred hands, mentioned in Homer.

sage, wise man, wizard.

who stole, &c. A previous misfortune of the Don's.

mét-a-mòr-phose, to transform, change into another shape. Greek, *meta*, "between" (in composition expressing "change"), and *morphé*, "form."

en-mi-ty, unfriendliness, ill-will, hatred. Lat. *inimicitia*, from *in*, "not," and *amicitia*, "friendship."

EXERCISE.—*Relate the Don's misfortune in your own way.*

HEALTH IN THE HOUSE.

THERE are five essential points in securing the health of houses—1. Pure air, 2. Pure water, 3. Efficient drainage, 4. Cleanliness, 5. Light. Without these no house can be healthy. And it will be unhealthy just in proportion as they are not.

1. To have PURE AIR, your house must be so built that the outer air shall find its way with ease to every corner of it. House-builders hardly ever consider this. The object in building a house is to obtain the largest interest for money, not to save doctors' bills to the tenants. But if tenants should

ever become so wise as to refuse to occupy unhealthy-built houses, builders would speedily be brought to their senses. As it is, they build what pays best. And there are always people foolish enough to take the houses they build. And if, in the course of time, the families die off, as is so often the case, nobody ever thinks of blaming any but Providence for the result. Ill-informed people help to keep up the delusion by laying the blame on "current contagions." Bad houses do for the healthy what bad hospitals do for the sick. Once insure that the air in a house is stagnant, and sickness is certain to follow.

No one thinks how much disease might be prevented, even in the country, by simply attending to providing the cottages with fresh air. I know whole districts in the south of England where, even when the windows are sashed, the sashes are never made to open at the top. I know whole districts in the north of England where, even in quite new cottages, the bedroom windows are not made to open at all, excepting a single pane, generally placed low down in the window. Now, if this open pane were in the upper row of the upper sash, it would be all very well. Very tolerable ventilation is procured by this means. But if it is in the lower row, it is all very bad. It does nothing but produce a draught setting inwards, actually driving the foul air upon the inmates, and not letting it out at all. . . .

Do you ever go into the bedrooms of any persons of any class, whether they contain one, two, or twenty people, whether they hold sick or well, at night, or before

the windows are opened in the morning, and ever find the air anything but unwholesomely close and foul? And why should it be so? And of how much importance is it that it should not be so? During sleep, the human body, even when in health, is far more injured by the influence of foul air than when awake. Why can't you keep the air all night, then, as pure as the air without, in the rooms you sleep in? But for this you must have sufficient outlet for the impure air you make yourself to go out; sufficient inlet for the pure air from without to come in. You must have open chimneys, open windows, or ventilators; no close curtains round your beds. . . .

And during almost every night of the year, pull your window an inch down *at the top*. Remember, AT THE TOP. . . .

2. PURE WATER is more general in houses than it used to be, thanks to the exertions of a few. Within the last few years, a large part of London was in the daily habit of using water polluted by the drainage of its sewers. This has happily been remedied. But in many parts of the country, well-water of a very impure kind is used for domestic purposes. And when epidemic disease shows itself, persons using such water are almost sure to suffer. Never use water that is not perfectly colourless, and without taste and smell. And never keep water in a tub or pail in an open sitting-room or bedroom. Water absorbs foul air, and becomes foul and unwholesome in consequence, and it damps the air in the room, making it also unwholesome.

3. It would be curious to ascertain by inspection how many houses said to be drained are really well drained. Many people would say, Surely all or most of them. But many people have no idea in what good drainage consists. They think that a sewer in the street, and a pipe leading to it from the house, is good drainage. All the while, the sewer may be nothing but a place from which sickness and ill-health are being poured into the house. No house with any untrapped, unventilated drain-pipe, communicating immediately with an unventilated sewer, can ever be healthy. An untrapped sink may at any time spread fevers and other diseases among the inmates of a palace.

4. Without CLEANLINESS, within and without your house, ventilation is comparatively useless. In certain foul districts poor people used to object to open their windows and doors, because of the foul smells that came in.

There are other ways of having filth inside a house, besides having dirt in heaps. Old papered walls of years' standing, dirty carpets, dirty walls and ceilings, uncleaned furniture, pollute the air just as much as if there were a dung-heap in the basement.

Even in the poorest houses, washing the walls and ceilings with quicklime-wash twice a year, would prevent more disease than you wot of.

5. A dark house is always an unhealthy house, always an ill-aired house, always a dirty house. Want of LIGHT stops growth, and promotes scrofula, rickets, &c., among the children.

People lose their health in a dark house, and if they fall sick they cannot get well again in it.

God lays down certain physical laws. Upon His carrying out such laws depends our responsibility (that much-abused word); for how could we have any responsibility for actions, the results of which we could not foresee, which would be the case if the carrying out of His laws were not certain. Yet we seem to be continually expecting that He will work a miracle, that is, break His own laws, expressly to relieve us of responsibility.

FLORENCE NIGHTINGALE.

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TWO LIGHTHOUSES.

1.—WHY THE WINDOWS OF THE LIGHTHOUSE OF ST. MATTHEW ARE MADE SO THICK.

I WAS once in the lighthouse of St. Matthew—St. Matthieu—on the west coast of France. It is certainly in the west of France. The whole of Brittany lies westward of the rest of France. Cape Finisterre, the French Land's End, is the last bit of Brittany to the west. The extreme west part of Cape Finisterre is called St. Matthew, and on its farthest edge, on the very brow of an enormous precipice, below which the waves of the Atlantic dash and roar, there stands the lighthouse, the most westerly thing in France.

The lighthouse-keeper explained how, though the light is called a revolving one, the great lamp stands still, with its lenses and reflectors all in their places; and how the same ingenious clockwork both feeds the lamp with oil, and causes to revolve around it a frame of metal plates with spaces between, so as alternately to hide the light and show it again. Then he opened a little door, and we stepped out from the light-room, and stood on a balcony in the fresh sea-air. And now I noticed that the windows surrounding the lamp, though perfectly clear, were of a surprising thickness.

"Yes," said the keeper, in answer to my look, for I had not spoken, "they are very strong;" and, suiting the action to the word, he clenched his hand, and striking, like a boxer, well out from the shoulder, he planted a blow right in the middle of a pane of glass without producing the slightest effect.

"I suppose," said I, "that it is on account of the storms that the glasses are made so thick." For I knew that that coast is one of the most tempestuous in the world; and the whole shore, as far both ways as we could see, was nothing but a bulwark of shattered precipices, from whose tops the fierce wind and lashing rain had swept away every trace of soil, while the sea below had hewn them, with rude masonry, into shapes of fantastic grandeur. It was natural to think that the windows were made of such thickness on account of the storms.

"No," said the keeper, "it is because of the sea-birds."

It was even so ; and many a time since then have I thought of the hapless fate of those poor wanderers of the deep. Far out on the ocean in the dark stormy nights, bewildered by the beating winds, and refused a resting-place on the tossing waves, they see the gleaming light, so friendly to the tempest-driven sailor, but, alas ! so treacherous to them. Swiftly they fly towards it, and, with the same almost incredible force with which a gannet of our own seas has been known to split the planks of a boat in which a fish lay exposed to his view, head-foremost they dash themselves against those fatal windows.

"We find them in the mornings," said the man, "in the court below."

"And are they still living ?" I inquired.

"Oh no, sir, they are dead ; their skulls are broken."

And this is why the windows of the lighthouse are made so thick.

2.—HOW THE LIGHTHOUSE-KEEPER AT PLADDA TAUGHT ME A LESSON.

It is long ago, and the same man will not be there now. He kept the Pladda light, which everybody who knows the Firth of Clyde has seen from a distance often and often ; and Pladda is a very little island, separated from the south end of Arran by a mile of sea, through which a strong tide runs. He was a friendly man—I have never known a lighthouse-keeper who was not—and as we talked in the lamp-room I was glad to hear him tell how he passed his time. I thought life in a

lighthouse in the sea would be dull, because there would, after a while, be so little that was new. No doubt he would know the Clyde steamers by their names, distinguishing them by the red and white lines round their funnels. I would give something for his knowledge of the rig of sloops, and schooners, and brigs, and barques, and ships. He would know how the young sea-gulls change from gray to white as they grow old. He would see on the waters wonderful lights and shadows which would make the fortune of a painter who could put them on his canvas. And he would become very weather-wise. Indeed, his eyes had a far-away look in them, as of a man accustomed to scan the horizon and peer into the clouds. But would not one tire of all this?

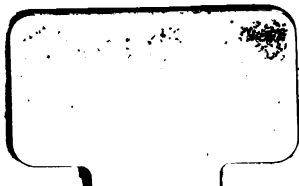
No, he said his life was not dull. He had his little ambition like the rest of us—he would like promotion to the less out-of-the-way lighthouse of Island Davar, but he did not weary. You see there were every day all the glasses to clean and the instruments to look over. Every joint and screw must be in working order. The brass and steel must be polished, and the beautiful silver reflectors behind the lamps rubbed till they shone again. Then all through the night the lamps must be watched lest anything should go wrong, and when rest had to be taken he durst not leave the room till he had rung a bell, and the assistant-keeper had come up the stair and taken his place. Terrible disasters might happen to vessels at sea, if the light should go out, or

burn low, even for a little while. Thus his simple and useful life went on, and his days and nights had only one aim, to keep Pladda light shining, and always at its best. The sailors and passengers going up and down the firth thought very little about the man up there in the lighthouse. But that did not matter. Was he not helping God to keep them all in safety in their courses? He did not know that as we talked he was teaching me a lesson, and neither did I. But it came into my mind afterwards, and I wish I had learned it better.

I have been to Eddystone in the south, the noble lighthouse which is about to be taken down, because the sea has undermined its foundation, though it is built upon a rock. From our remotest shores I have looked at the lighthouse on the Flugga in the far, far north—Flugga, where poor Lady Franklin gathered a spray of seaweed, saying she could get no nearer to her lost husband in the polar seas. But I remember Pladda best, and the busy man with the far-away look in his eyes, and I think of a Greater One who, even by this little story, is saying to you and me, LET YOUR LIGHT SO SHINE.

REV. J. M'MURTRIE.

END OF BOOK IV.



AND TAYLOR

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